HEALTH FOR ALL ONTARIO

Dr. R.A. Spasoff, Chairman
Dr. P. Cole
Mr. F. Dale
Dr. D. Korn
Dr. P. Manga
Dr. V. Marshall
Ms. F. Picherack
Ms. N. Shosenberg
Mr. L. Zon

REPORT OF THE PANEL ON HEALTH GOALS FOR ONTARIO

August 1987

The Honourable Murray Elston
Minister of Health
Province of Ontario

Dear Mr. Elston:

We are pleased to submit the report of the Panel on Health Goals for Ontario. Throughout our work we have been gratified at the tremendous community support for the development of health goals. We have also noted the complementarity between the themes of our report and that of the recent Ontario Health Review Panel. We believe there now exists an outstanding opportunity to reorient the Province's approach to health. It is crucial that the momentum not be lost, and we hope for an early announcement regarding the follow-up process.

We are encouraged by your support and leadership.

Yours Sincerely,

Peter Cole

Floyd Dale

David Korn

Pran Manga

Victor Marshall

Frances Picherack

Nancy Shosenberg

Robert Spasoff (Chairman)

Lorne Zon

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EXECUTIVE SUMMARY

Health goals can provide a sense of direction to efforts to improve health, aid in reorientation of such efforts, promote intersectoral responsibility for health, and permit evaluation of health policies and programmes. The Panel on Health Goals proposes the following health goals for Ontario:

GOAL 1 ACHIEVE EQUITY IN HEALTH OPPORTUNITIES.

- 1.1 Provide all Ontarians with equal opportunities to attain health (page 46).
- 1.2 Provide all Ontarians with adequate protection from risks to health (p. 49).
- 1.3 Ensure equitable use of health care services (p. 49).

GOAL 2 ENABLE ONTARIANS TO ACHIEVE THEIR HEALTH POTENTIAL.

- 2.1 Empower people to gain greater control over their health (p. 51).
- 2.2 Support individuals to adopt a healthful lifestyle (p. 52).
- 2.3 Encourage participation in a broad range of meaningful activities (p. 53).

GOAL 3 INCREASE THE HEALTH EXPECTANCY OF ONTARIANS.

- 3.1 Reduce morbidity and mortality from circulatory disease (p. 56).
- 3.2 Reduce morbidity and mortality from trauma (p. 56).
- 3.3 Reduce morbidity and disability from mental health problems, and reduce the rate of suicide (p. 58).
- 3.4 Reduce morbidity and mortality from cancer (p. 59).

3.5 Reduce morbidity and mortality from chronic respiratory disease (p. 60).
3.6 Reduce morbidity and mortality from communicable diseases (p. 60).
3.7 Reduce morbidity and disability from musculoskeletal diseases (p. 63).
3.8 Reduce the incidence of dental disease (p. 63).
3.9 Reduce the impact of disease and disability (p. 64).

GOAL 4 PROVIDE ENVIRONMENTS WHICH SUPPORT HEALTH.
4.1 Foster strong and supportive family relationships (p. 66).
4.2 Foster strong and supportive communities (p. 67).
4.3 Ensure working environments which are safe and which support health (p. 69).
4.4 Ensure a safe, high quality physical environment (p. 71).
4.5 Provide habitats which support health (p. 73).

GOAL 5 ENCOURAGE BEHAVIOURS WHICH SUPPORT HEALTH.
5.1 Eliminate the use of tobacco (p. 74).
5.2 Eliminate the inappropriate use of alcohol and other drugs (p. 77).
5.3 Improve the nutritional quality of diets (p. 78).
5.4 Increase levels of physical activity (p. 80).
5.5 Promote healthy sexuality (p. 81).
5.6 Promote safe driving behaviour (p. 83).
5.7 Eliminate violent and intimidating behaviour (p. 84).

GOAL 6 PROVIDE HEALTH SERVICES WHICH SUPPORT HEALTH.
6.1 Provide accessible, effective health services for all (p. 87).

6.2 Shift the emphasis towards health promotion and disease prevention (p. 90).

6.3 Increase community participation in health services (p. 91).

GOAL 7 ESTABLISH PUBLIC POLICY WHICH SUPPORTS HEALTH (p. 92).

To achieve these goals, the Panel recommends that the following strategies be used:

1. Economic development in support of health, especially income support (p. 94).

2. A management process which directs resources towards achievement of health goals (p. 95).

3. Resource allocation and re-allocation to achieve improved health outcomes (p. 96).

4. Coordination and collaboration among agencies concerned with health (p. 96).

5. Legislation and regulations for health, including incentives, disincentives and enabling legislation (p. 98).

6. Social marketing to place health on the public agenda, and to enhance public acceptance of the goals process (p. 98).

7. Community development to enable local communities to work more effectively to achieve health (p. 100).

8. Health education of public and professionals (p. 101).

9. Health advocacy on behalf of poorly represented issues and groups (p. 101).

10. Appropriate use of technology (p. 102).

11. Research and information (p. 103).

To ensure prompt and effective follow-up, the Panel makes the following recommendations:

1. That the goals presented in this document be accepted by the government of Ontario as a basis for public policy regarding health (p. 109).

2. That the province collaborate with the federal government and with other provincial governments to develop a consistent national approach to health policy for Canada (p. 109).

3. That the Ontario Ministry of Health accept responsibility as lead ministry for developing public policy supportive of health in Ontario (p. 109).

4. That the Ministry of Health develop a planning thrust which supports achievement of the health goals (p. 110).

5. That a Health Goals Office be established to coordinate the goals process, with sufficient resources to function effectively (p. 110).

6. That an Advisory Committee on Health Goals be established, reporting to the Minister of Health and composed of representatives of the public and of health organizations and professions (p. 111).

7. That expert working groups be formed to develop objectives based on each goal (p. 112).

8. That the provincial government commit resources to support local communities in developing health objectives (p. 113).

9. That Ontario health data be improved, beginning with (a) expansion of routinely collected data bases to render them useful for planning and evaluation; and (b) conduct of an Ontario Health Survey as soon as possible to provide baseline data on health status, health determinants and attitudes, and repetition of this survey at regular intervals (p. 113).

10. That a conference of interested ministries and organizations be held soon after release of this report, to discuss its implementation (p. 113).

11. That a condensed version of this report be produced for general circulation (p. 113).

12. That the Minister of Health report regularly to the legislature regarding progress in achieving the health goals (p. 114).

13. That District Health Councils be designated the local agencies responsible to take the lead in the health goals process (p. 116).

LIST OF EXHIBITS

1. Age-standardized mortality rates, Ontario and other jurisdictions, early 1980s

2. Infant death rates, Ontario and other jurisdictions, early 1980s

3. Life expectancy, Ontario and other jurisdictions, early 1980s

4. Age-standardized mortality rates, Ontario, selected years, 1921 to 1984

5. Number of deaths from leading causes, Ontario, 1984

6. Potential years of life lost from leading causes, Ontario, 1984

7. Trends in leading causes of death, Ontario, 1950 to 1984

8. Major causes of hospital admission, Ontario, 1979-83

9. Causes of disability, Canada, 1981

10. Health expectancy by region and gender, Canada, 1978

11. Percentage of Ontario residents practising positive and negative health behaviours, 1985

12. Chief causes of death, by age, Ontario, 1983

13. Mortality by region, Ontario, 1979 to 1983

14. Health expectancy by income level and gender, Canada, 1978

15. Prevalence rates of chronic health problems among Ontario children, by socioeconomic status, Ontario, early 1980s

16. Age-specific mortality rates on Indian reserves, 1977-1982

17. Infant mortality, Indian and Canadian population, 1983

PREAMBLE

Terms of Reference

The Ontario Ministry of Health initiated a goal-setting process in the fall of 1985. In March 1986 Robert Spasoff was approached regarding methods of achieving broader participation in the process. The establishment of the Panel on Health Goals for Ontario was confirmed in a letter from the Minister of Health dated Nov 25, 1986. The Panel was to "pr de advice to the Minister ... regarding health goals for Ontario. The goals are to be linked to appropriate data and stated in a way which will facilitate planning for their achievement". In his letter, the Minister noted "we need a common framework based on measures of health status for policy and program planning in health. Please feel free to make some suggestions regarding the process of developing objectives and mechanisms to track our progress towards their achievement".

Members of the Panel

The members of the Panel, chosen for their expertise and for their commitment to the health goals process, were:

Peter Cole, Commissioner and Medical Officer of Health, Peel Regional Health Department.

Floyd Dale, Executive Director, County of Simcoe District Health Council.

David Korn, Chief Medical Officer of Health, Ontario Ministry of Health; now President and Chief Executive Officer, The Donwood Institute.

Pran Manga, Research Professor, Masters Programme in Health Administration, University of Ottawa.

Victor Marshall, Professor, Department of Behavioural Science, University of Toronto.

Frances Picherack, Director of Public Health Nurses, City of North York Department of Public Health.

Nancy Shosenberg, Minister's Advisory Group on Health Promotion.

Robert Spasoff, Professor and Chairman, Department of Epidemiology and Community Medicine, University of Ottawa (Chairman).

Lorne Zon, Manager of Corporate Policy, Ontario Ministry of Health.

The Ministry Liaison Officer was Suzanne Jackson, Health Promotion Branch, Ontario Ministry of Health. The Project Coordinator was Janet Hatcher Roberts. Research Assistants were Judith Wood Bayne, Ann Pederson and Wendy Muckle. Mary Gordon, resident in Community Medicine in the University of Ottawa, contributed significantly to the project.

Methods Used by the Panel

The Panel met 20 times between 8 December 1986 and 13 July 1987, and carried out the following steps:

1. Reviewed the literature on health goals, in particular the experience in other jurisdictions.

2. Solicited input from a wide variety of health and social organizations; the Minister's Advisory Group on Health Promotion assisted by soliciting input from the community at large.

3. Assembled and reviewed available data on the current health status of Ontarians.

4. Consulted experts in the goals process, notably Kimmo Leppo of the World Health Organization, European Region, and James Harrell of the United States Office of Health Promotion and Disease Prevention.

5. Communicated regularly with the Ministry of Health and with two related advisory groups, the Minister's Advisory Group on Health Promotion (Steve Podborski, Chairman) and the Cntario Health Review Panel (John R. Evans, Chairman).

6. Produced four working papers and circulated them to a large number of interested organizations for comment.

7. Invited representatives of many of these organizations to a conference held at the Guild Inn in Scarborough, 22-24 April 1987, to discuss the papers.

8. Developed this final report.

Acknowledgements

The Panel extends its thanks to the many organizations and individuals who made submissions; to international consultants Kimmo Leppo of the World Health Organization, European Office, and James Harrell of the United States Office of Health Promotion and Disease Prevention; to local consultants Ron Labonté and Sandra Marsden; to the Ontario Health Review Panel for making available the report "Health Profiles of the Citizens of Ontario: Health Objectives, Performance Indicators and Surveillance Techniques" by Larry W. Chambers; to Maurice Jetté of the Minister's Advisory Group on Health Promotion for providing access to his report "Health Indicators, Province of Ontario"; and to the Ontario Social Assistance Review Committee for making available Michele Harding's report on "The Relationship between

Economic Status and Health Status and Opportunities: A Synthesis". Particular thanks are due to the employers of the Panel members, for supporting their participation on the Panel.

I. INTRODUCTION

Why Health Goals?*

Health has been described by the World Health Organization as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity"[1]. The WHO description emphasizes the multi-dimensional nature of health, and recognizes the breadth of its determinants. In 1984 the European Region of WHO expanded upon the classic conception to describe health as "the extent to which an individual or group is able, on the one hand, to realize aspirations and satisfy needs; and, on the other hand, to change or cope with the environment. Health is therefore seen as a resource for everyday life, not the objective of living; it is a positive concept emphasizing social and personal resources, as well as physical capacity"[2]. This version is accepted as the working definition in this report. This very broad conception of health is in contrast with our efforts to improve health. Enormous amounts of money are spent on health services, and much smaller amounts on health promotion, but these efforts lack coordination and an overall sense of direction. Development of health goals can help to focus these efforts, and thus lead to improvements in health.

The value of health goals and objectives was recently recognized by a distinguished panel convened to identify directions for health improvement activities in the United

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* In this report the word **"goal"** is used to refer to a broad statement of a desired (but not necessarily attainable) change, and **"objective"** to refer to a more specific statement, in measurable form. **"Target"** refers to the amount of change desired and the date by which it is to attained. In another formulation, the target is part of the objective.

States[3]. Its first theme was to "Refine and apply national objectives in disease prevention and health promotion". Referring to previous efforts in this direction (to be discussed below), it pointed out that "the process of establishing and tracking measurable national objectives to be achieved by 1990 has not only helped to establish a national health agenda and identify explicit health priorities, but has also facilitated organized responses and has supported progress toward enhanced levels of health".

The establishment of goals is a crucial step in strategic planning, a creative process intended to lead an organization in a purposeful direction. Goals are formulated on the basis of social, political, economic and technological realities. These goals serve as guidelines by which the needs of the community can be coupled with the available resources (monetary, material and human) to generate priorities for programme development. At the same time, the goals encourage coordination between ministries within government, and between organizations, services and groups at the community level. The Minister of Health has identified strategic planning as a priority for the Ministry, and a planning process is currently being developed.

Another important set of factors that give impetus to the specification of health goals is the need for a new framework for policy reform and priority setting. Until recently, Canadian health policy was largely based on just one goal, that of improving access to health care services. The absence of health goals leaves unchallenged this status quo and its priorities. Efforts to specify health goals are a recognition that equality of access to health care services does not necessarily narrow inequalities in health status. All goals exercises give increased emphasis to

health promotion and disease prevention*. This shift in emphasis has major implications for public policy in general, not just for health policy, and for the focus of decision-making in health matters. The specification of health goals underscores the fact that the responsibility for health resides both with the public and with various levels of government. The actions of many government ministries affect health, not just those of the Ministry of Health, a fact calling for inter-ministerial planning and coordination.

Finally, health goals can provide an objective basis for evaluation of health programmes, and for the planning of subsequent policies and programmes.

A Vision of Health

The ultimate mission of the health goals process is the achievement of health for the whole Ontario population. The core values which underpin the Panel's vision for achievement of this mission are health as a resource, a sense of community, equity, and quality of life. In this vision, the people of Ontario would support each other in performing all the functions of life and in developing to their maximum potential[4]. Disease, disability and premature death would be minimized. Creating a healthy community would involve the members of that community in devising and implementing strategies to enhance their own health.

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* **Health promotion** has been defined by the World Health Organization as the process of enabling people to increase control over, and to improve, their health[2]. It is thus much wider than health education, and encompasses all of the things we do to promote health. **Disease prevention** is directed at specific diseases, and aims to prevent negative changes in health, whereas health promotion aims to promote positive changes. The two approaches are thus complementary, working on opposite sides of the health ledger.

The key factors enabling Ontarians to enjoy more years in good health would be peace, an adequate income, adequate housing and food, and a valued role to play in family, work and community, along with a safe environment and a healthy lifestyle. Ontario would strive to be ecologically sustainable: pollution would be minimized, green spaces in both urban and rural environments would be valued, industrial and domestic waste would be minimized and disposed safely, and work environments would be safe. There would be equity in opportunities to attain and maintain health and in access to health services, regardless of geography, income, age or cultural background.

This vision is not static, but a dynamic process involving Ontarians in diverse strategies to enhance their own health. Such strategies would include health promoting programmes and services that affect the community at all levels, as part of a coordinated public policy with health improvement as an objective[5].

This positive vision of a healthy Ontario represents a formidable challenge. It does not mean that all disease and disability would be eliminated, nor that there would be no challenge to daily living. But it does mean that structural sources of disease and disability (such as pollution and poverty) would continually be reduced. Goals consistent with such a vision would be direction-setting, but not necessarily attainable.

To help achieve this vision, the Panel has developed a set of recommended health goals for Ontario, identified strategies to achieve the goals, and suggested mechanisms for monitoring progress toward their achievement.

Experience in Other Jurisdictions

Virtually all industrialized countries have developed or are currently developing strategic health plans incorporating health goals and objectives. Interestingly, the roots of this movement are largely Canadian. The 1974 document A New Perspective on the Health of Canadians[6] introduced the health field concept and recognized the important roles of behaviour and environment in the determination of health, in addition to health services. The report suggested two broad "objectives"* for Canada: to reduce mental and physical health hazards for those parts of the Canadian population whose risks are high, and to improve the accessibility of health care for those whose current access is unsatisfactory. It then proposed five strategies to achieve these objectives, one of which was a "goal-setting" strategy, with seven possible courses of action. Although Canada has never proceeded to develop explicit health goals, the origins of a great many of the subsequent efforts in Canada and beyond can be clearly found in this document.

In 1977 the World Health Assembly resolved that "the main social target of governments and WHO in the coming decades should be the attainment by all citizens of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life"[7]; this is the famous "Health for All by the Year 2000 (HFA-2000)" message. Since then, many countries and smaller jurisdictions have developed health goals as a framework for strategies to achieve this global aim. Notable among these have been the efforts in Europe, the United States and the province of Québec. The goal-setting process has varied in

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* Note that the New Perspective reverses the distinction between goals and objectives made earlier in this report.

breadth, depending on the underlying conception of health.

World Health Organization, European Region

The European Region decided that developed nations could best achieve health for all by the year 2000 through health promotion, and in 1980 proclaimed a common health policy based on health promotion, which was adopted by all its members. In 1984 it published Targets for HFA2000[8], a landmark document which proposed improvements in health, indicated where action was required to realize these improvements, and provided a tool to monitor progress towards these goals. The document had six themes:

- equity
- health promotion
- community participation
- multisectoral cooperation
- primary health care
- international cooperation.

It identified several prerequisites for health: freedom from war, equal opportunity for all, satisfaction of basic needs, and political will and public support.

Thirty-eight "targets" (objectives, in the terminology of this report) were specified, each with a quantitative endpoint and a completion date. The first 12 targets referred to desired health outcomes, and were grouped into four general headings:

- achieving equity in health
- improving quality of life ("adding life to years")
- reducing morbidity ("adding health to life")
- reducing mortality ("adding years to life").

The remaining targets identified mechanisms for the achievement of health, using the health field concept (5 targets referring to lifestyles, 8 to environment, and 6 to health

care), and for necessary research and support (7 targets). Each target was accompanied by a Problem Statement and by Suggested Solutions.

The base year for evaluation was set at 1980, with targets based on historical trends in each field, expected evolution in specific areas and the probable effects of intervention. Progress was to be monitored by indicators related to each target, and filed with the European Regional Office at specified intervals.

The European Region accepted these targets, and charged each nation to develop a national document adapting the regional targets to its own needs. About 15 nations have begun this process, and some have completed it. There is considerable variation in the approaches taken by the various nations, with some focussing on national and others on local initiatives.

In November 1986, the European Region of WHO, Health and Welfare Canada and the Canadian Public Health Association held an International Conference on Health Promotion in Ottawa. The Ottawa Charter for Health Promotion[9], endorsed at that conference, relates directly to these European efforts, providing a clear vision of current health promotion concepts.

United States

The United States effort was based on a Management-by-Objectives planning model, applied to various age groups (life stages). It began in 1979 when the publication Healthy People - the Surgeon General's Report on Health Promotion and Disease Prevention[10] set broad goals designed to improve the health status of five age groups by 1990.

The report stressed that these goals could be achieved only through the combined efforts of all segments of society.

A second phase began in 1980 when Promoting Health/ Preventing Disease - Objectives for the Nation[11] translated the goals into 226 specific objectives, with targets and dates. A related publication, Model Standards[12] presented guidelines to assist local public health agencies to achieve equity in health. A major conference was held in 1984 (Prospects for a Healthier America: Achieving the Nation's Health Promotion Objectives) to acquaint various national organizations with the objectives for the nation and to encourage their participation in a coordinated effort.

A Mid-Course Review[13] was published in 1986, evaluating progress towards achieving the 1990 objectives, and an expert group is now developing the next phase of objectives for the year 2000.

This project has been maintained over several administrations within the United States government, and is impressive for its scope as a national effort rather than simply a federal government one. It focuses largely on measurable changes, which tends to limit it to disease prevention, with relatively little emphasis on health promotion.

Canada

Québec. The Québec government has undertaken an outstanding health planning project in its Objectif: Santé[14] (in English, Objective: A Health Concept in Québec[15]). Principal health problems for different life stages were outlined and their impact on health evaluated in terms of mortality, disability and "life expectancy in good health". The health

field concept was used to elaborate the risk factors affecting health, with the environment considered from its social, economic, work and physical aspects. Criteria for choosing objectives were formulated and applied to health problems and risk factors to reach five general health improvement "objectives" (goals, in the terminology of this report) and then ten specific health improvement "objectives" (goals) related to four life cycle stages. All of these were stated in terms of desired outcomes, without targets. Priority measures (interventions) for risk reduction were presented for each of the specific objectives, to stimulate debate.

Ontario. There have been several initiatives within Ontario. The 1983 Health Care in the 80s and Beyond project[16] solicited input from across the province and held a series of regional conferences aimed at developing consensus on the directions in which health initiatives should proceed, but no explicit health goals were developed. As its contribution to this project, the Ontario Council of Health developed a set of draft health goals for Ontario, and circulated them to health organizations for comment. In 1986, the Ministry of Health developed an internal working document on health goals[17], which has served as an important basis for the Panel's deliberations. The report took a life-stage approach, presenting extensive mortality, morbidity and disability data for each age group, and defining both outcome and process-oriented goals for each.

The Health Goals Panel has drawn upon each of these initiatives as valuable background to its work. Concurrent with the work of the Panel, the Ontario Health Review Panel has studied the directions in which the health care system should be moving[18]. That Panel has identified three major issues for the health sector: strengthening the role of the

individual in health and health care, the need to link the elements of health care delivery and to increase emphasis on ambulatory and community-based care, and the need for a strategy for health in Ontario.

Local. Several District Health Councils and Public Health Departments have established health goals, or are in the process of doing so. For example, the Ottawa-Carleton Regional Health Department strategic plan outlined broad initiatives aimed at producing healthy behaviours and healthy environments, and the Durham Regional District Health Council has developed comprehensive health objectives for the Durham region.

Federal. Although health services are provincially mandated in Canada, health is significantly affected by federal initiatives within and around the health sector. The recent Achieving Health for All: A Framework for Health Promotion[19] released by the Honourable Jake Epp, proposed health promotion as an approach to help Canadians meet emerging health challenges, complementing and strengthening the existing system of health care. It set a national direction for health promotion initiatives for Canadians, identifying three challenges as not adequately addressed by health policies and practices: inequalities in health, continued existence of various preventable diseases, and high prevalence of chronic disability combined with lack of adequate community support. It then identified three health promotion mechanisms to deal with these challenges (self-care, mutual aid, and healthy environments) and three strategies for the implementation of these mechanisms: fostering public participation, strengthening community health services, and coordinating healthy public policy. Although the report did not offer explicit health goals, it established a framework within which goals might be set.

Summary

The value of setting health goals has been widely acknowledged, in Ontario and beyond. The Panel has been most favourably impressed by projects which took a broad approach to health and its determinants, and which emphasized positive efforts at health improvement. The Panel recognizes the need for a broad overall approach to policy formation and resource allocation so that health goals can be achieved, but also recognizes the need to retain maximum flexibility and local input in the goals process.

II. THE DATA BASE FOR HEALTH GOALS

The Health of the Ontario Population

An overview of health indicators* is presented in this chapter. Compared to most parts of the world, Ontario is fortunate in having a healthy population, with respect to life expectancy and frequency of illness and disability. Our mortality rates are among the lowest in the world (Exhibit 1)**, as is our infant mortality rate (Exhibit 2). Our life expectancy is correspondingly high, although lower than that of Japan and some European countries (Exhibit 3). There has been continual improvement in these statistics, although a very recent rise in the mortality rate for females is worrisome (Exhibit 4). Causes of death are shown in Exhibit 5, with circulatory disease and cancer leading the list. A more useful measure for many purposes is Potential Years of Life Lost (PYLL)*** (Exhibit 6), for which cancer, circulatory disease and trauma are virtually tied. In common with the United States there has been a sharp drop in mortality from ischaemic heart disease and stroke over the past two decades, but a disturbing rise in mortality from lung cancer (Exhibit 7).

Morbidity rates are much less available, and in general do not permit international comparisons. The leading cause

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* More accurately, most "health indicators" actually indicate the absence of health.

** Exhibits are found at the end of this Chapter, beginning on page 19.

*** Potential Years of Life Lost is the sum of all the years of life lost up to some arbitrarily selected age (75 in this case). It gives greater importance to conditions which tend to cause death at young ages.

of admissions to acute hospitals is diseases of the circulatory system (Exhibit 8). This is quite different from the leading causes of short-term disability (for which respiratory infection predominates) and for long-term disability, for which musculoskeletal disorders are most prominent (Exhibit 9).

Mortality and morbidity data can be combined to yield estimates of health expectancy, or life expectancy in good health[20]. Exhibit 10 shows that Ontario data are very similar to those for the rest of Canada.

We do not have adequate information on the environmental risks to which Ontario residents are exposed, but do have some information on behavioural risk factors. Information on the prevalence of health-seeking and health-damaging behaviours can perhaps give some indication of the future health of the community (Exhibit 11). Although most Ontario residents engage in a variety of health-seeking behaviours, too many smoke and drink alcohol to excess.

Variations in Health

The generally favourable overall health indicators conceal considerable variability in the health of the population. These are of special concern in a society which places a high priority on equal opportunities. Data specific to Ontario are limited, and in some cases the Panel has used national data, assuming that they reflect the Ontario situation, since Ontario accounts for over one-third of the national population.

Age. Mortality and morbidity increase with age, and causes of death vary markedly (Exhibit 12). Older people have a relatively high prevalence of chronic disability, but most

are quite healthy and function very well in the community.

Gender. It is well known that women have lower mortality rates than men at all ages (Exhibit 1). Interestingly, they have higher disability rates, so that the difference in health expectancy is comparatively small (Exhibit 10). Ontario men can expect to live 71.2 years, during 59.5 of which they will be unrestricted in activities, while Ontario women can expect to live 78.4 years, 63.7 of them unrestricted.

Region. Age-adjusted mortality rates are generally higher in the north of the province (Exhibit 13). The infant mortality rate is 8.6 per 1000 live births in the province as a whole, but is 17.0 in the Kenora-Rainy River region; even within Toronto it varies from 4.0 to 7.5. There are no adequate morbidity data for Ontario regions: hospital morbidity data are available, but tend to reflect differences in supply of hospital beds, while current survey data suffer from limitations in design and sample size.

Income. National data show a strong inverse relationship between income and mortality (Exhibit 14). Life expectancy for males in the fifth of the population with the lowest income is 6.3 years lower than that for the fifth with the highest income; for females the difference is 2.8 years. The same Exhibit shows that differences in health expectancy (life expectancy in good health) are even greater. For example, males in the fifth of the population with the highest income enjoy an additional 14.3 years of life free of activity restriction compared to those in the lowest fifth. For females the difference is 7.6 years. Thus the poor not only have shorter lives but also ones in which more years are characterized by disability and activity restriction. Similar differences exist at the extremes of life. A

recent analysis of health status differences in Ontario children concluded that children in lower socioeconomic classes were much more likely to have chronic health problems and functional limitations (Exhibit 15)[21]. The same study revealed that welfare children had more psychiatric disorders, poorer school performance and higher smoking rates than their non-welfare peers[22]. A study based on the Ontario Longitudinal Study of Aging suggested that the poor (especially the newly poor) often perceive themselves to be in poorer health[23].

Occupation. Very few mortality data are available, since occupation recorded on death certificates is not coded in Canada. Therefore, heavy reliance must be placed on workers' compensation claims, despite the fact that compensatable conditions account for only a portion of the health differences among occupations. The number of fatalities per million person-hours worked is as much as ten times higher in some industries (forestry, mining, fishing) as in the work force at large; the rate for injuries is three times as high in forestry and twice as high in transportation as in the general work-force[24].

Native Health. Native peoples suffer much higher mortality and morbidity than whites, especially from trauma. Mao et al[25] found all-causes Standardized Mortality Ratios of 1.55 for males and 1.79 for females living on Indian Reserves in Ontario, for ages 1-69. Further breakdowns were available only for all 6 provinces included in the study. The excess mortality affected all except the oldest age groups. The most striking excesses in mortality were for trauma and for alcoholism (Exhibit 16), with motor vehicle crashes and suicide particularly high. The infant mortality rate among native populations is also much higher than for the rest of Ontario[26]. The Canadian data in Exhibit 17 show that the

major disparity is in the post-neonatal mortality rate, which is most sensitive to social and environmental factors.

Ethnocultural Groups. Ontario has a large diversity of ethnocultural groups, many of which have special needs. Recent immigrants in particular are often poor and unfamiliar with our health care system, at the same time as they are challenged to cope with the problems of adapting to a new country. Data are extremely limited, but health workers are aware that recent immigrants suffer from significant health problems.

Submissions from Organizations

Mortality, morbidity and disability cannot be mechanistically transformed into health goals. The values, perceptions and opinions of the public and its various constituencies are vitally important ingredients in the process of establishing health goals.

Accordingly, the Panel wrote to over 150 organizations which it thought might be interested in the health goals process. Despite very short deadlines, about 75 replies were received, from District Health Councils, professional organizations, and some lay organizations (Appendix II). The topics covered in these submissions are summarized in Appendix III, using a framework to be developed in the next chapter. Those organizations which responded were strongly supportive of the goals process, and many presented specific proposals for goals. Two overwhelming themes were calls for reorientation of the health system in the direction of health promotion and disease prevention, and for increased emphasis on community-based services. The need for greater equity in health was also a common theme. Many of the submissions went beyond proposing goals to identify strateg-

ies for the improvement of health.

Public Perceptions of Health

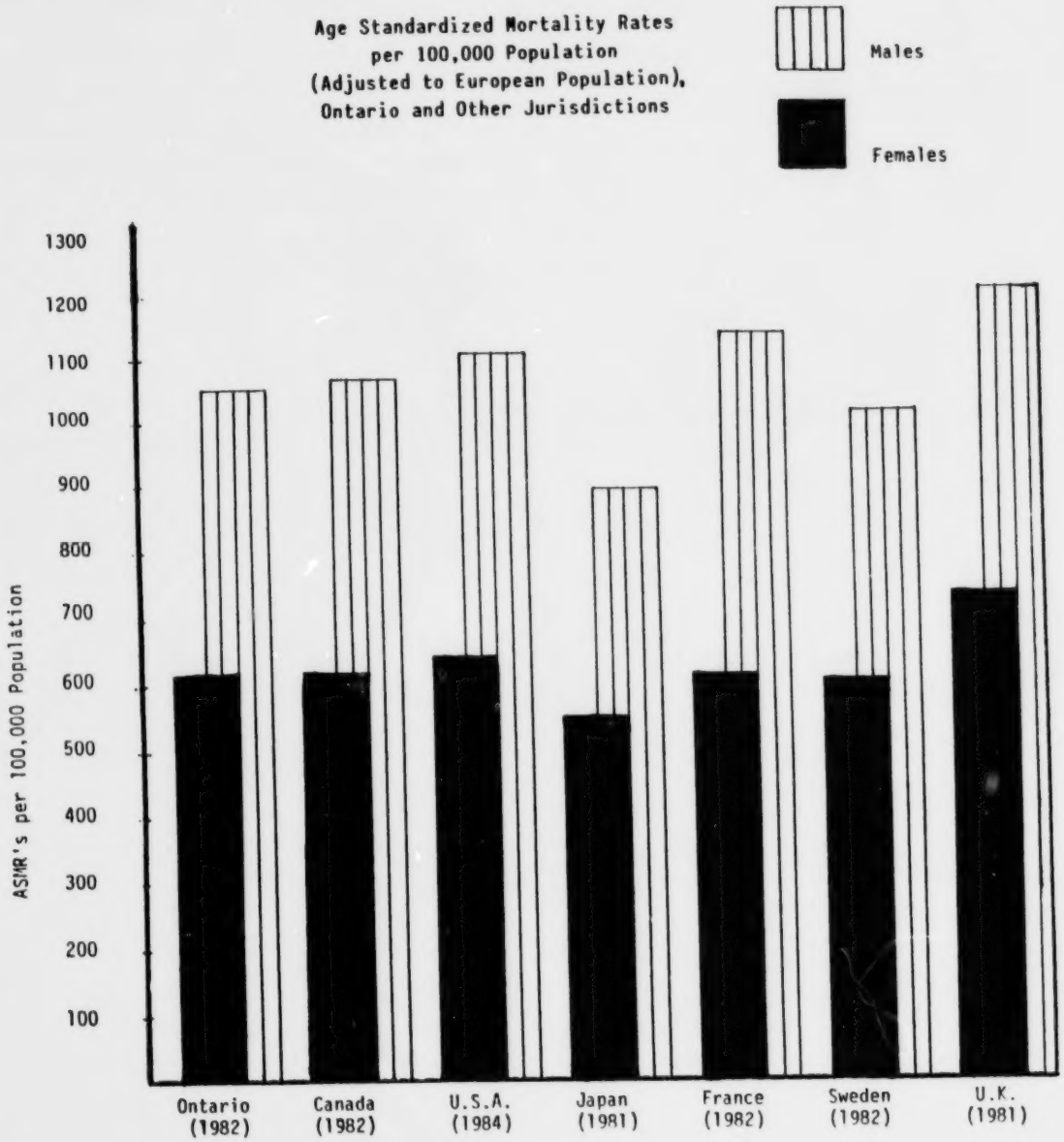
The Panel had available to it the results of several public opinion polls commissioned by the Ontario Ministry of Health in 1983 and 1984. The majority of the questions dealt with specific issues within the health care system, but several illuminate general attitudes toward health. When asked to evaluate the importance of several factors in their lives, respondents ranked a number of health-promoting behaviours immediately behind spending time with family. These included eating healthy foods, personal and workplace safety, getting plenty of sleep, and taking time to relax. This suggests that the population places a high priority on health, and will be receptive to efforts aimed at its improvement.

Summary

The people of Ontario are generally healthy, relative to the populations of other countries and provinces, but there are many opportunities for improvement, especially when one adopts an expanded definition of health. There is also cause for concern about the inequalities in health status that prevail in the province. In the main, these do not appear to relate to inequalities in the access to health care services, but rather to inequalities in more basic determinants of health, presumably related to environment and health habits. Better quality data are needed on morbidity, precursors, attitudes, and environmental risks, especially focussing on equity issues. There is much support for trying new approaches to improving health, through health promotion and disease prevention.

Exhibit 1

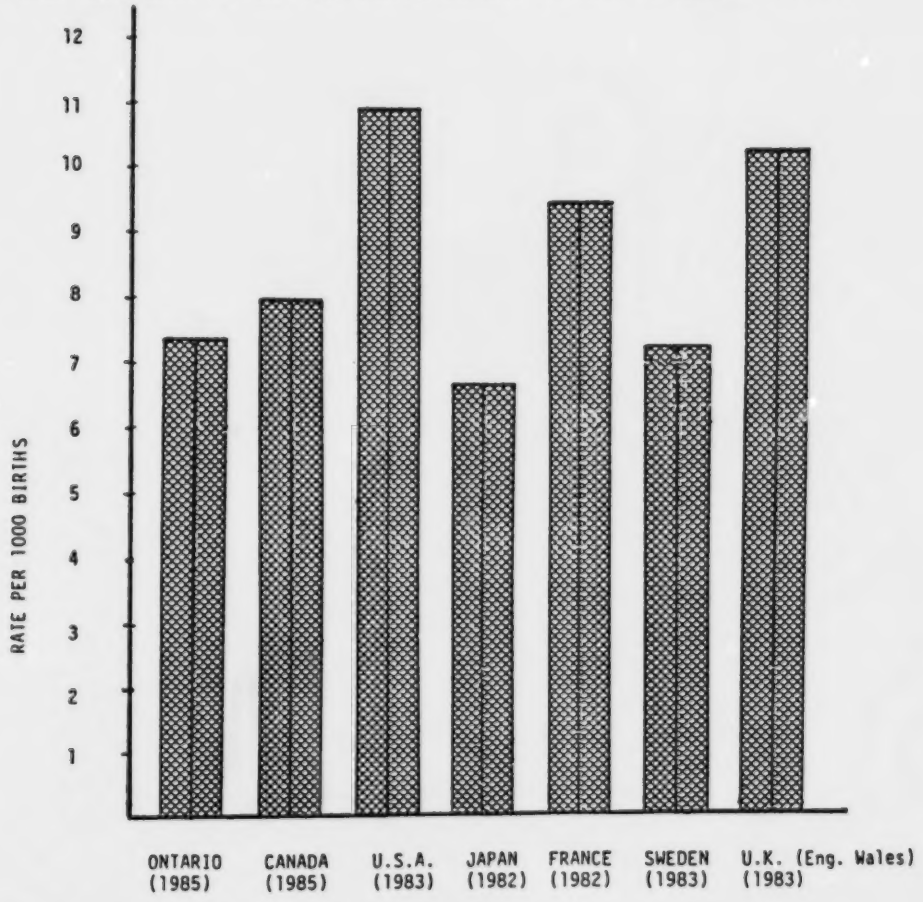
Age Standardized Mortality Rates
per 100,000 Population
(Adjusted to European Population),
Ontario and Other Jurisdictions



Sources: World Health Organization Health Statistics Annual, 1985
Ontario Statistics, 1986

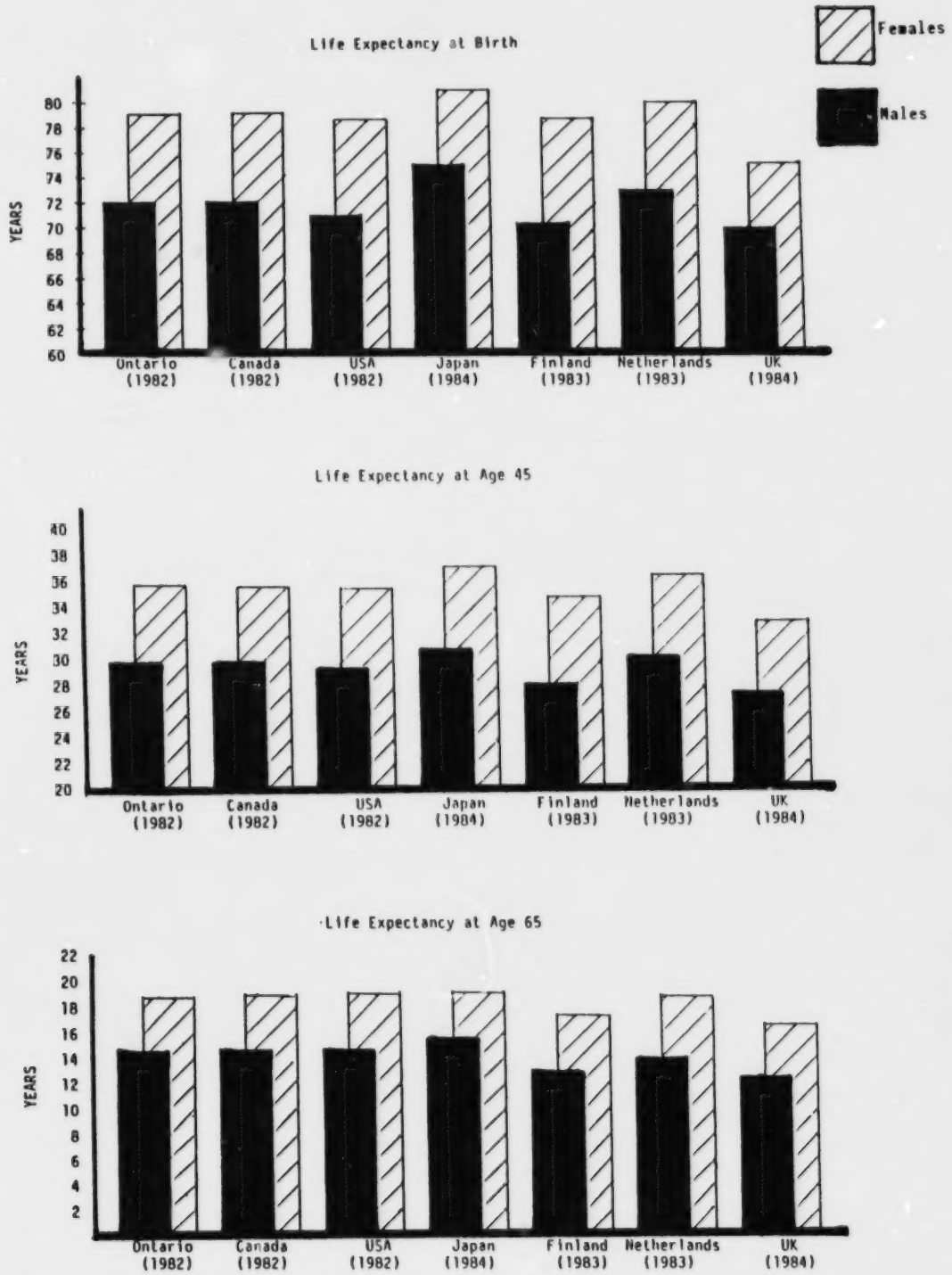
EXHIBIT 2

INFANT DEATH RATES PER 1000 LIVE BIRTHS, ONTARIO, CANADA, AND SELECTED COUNTRIES



Sources: World Health Organization Statistics Annual, 1985
Statistics Canada Catalogue 84 204 Annual, 1985

Exhibit 3
Life Expectancy, Ontario and Other Jurisdictions



Sources: World Health Organization, 1985
Statistics Canada, 84 - 532 Occasional, 1985

EXHIBIT 4

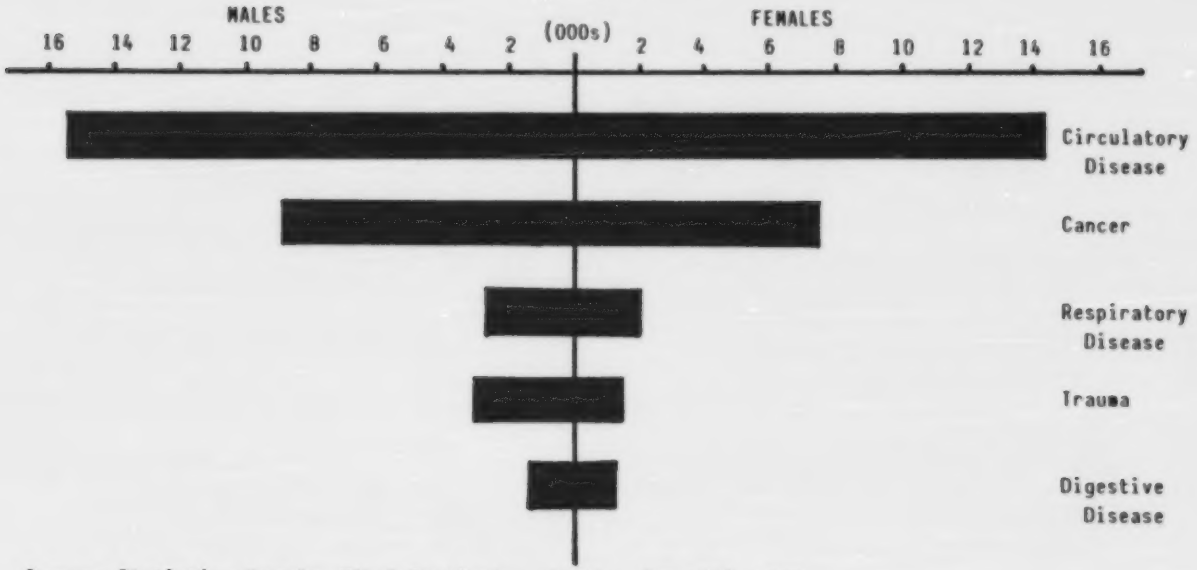
AGE STANDARDIZED MORTALITY RATES,
ONTARIO, SELECTED YEARS 1921 to 1984

*Standardized to 1956 age structure of Canadian population for years up to 1978 and to 1971 age structure from 1979. Rates are per 1,000 population.

Source: Statistics Canada, Vital Statistics, Births and Deaths (84-204)

EXHIBIT 5

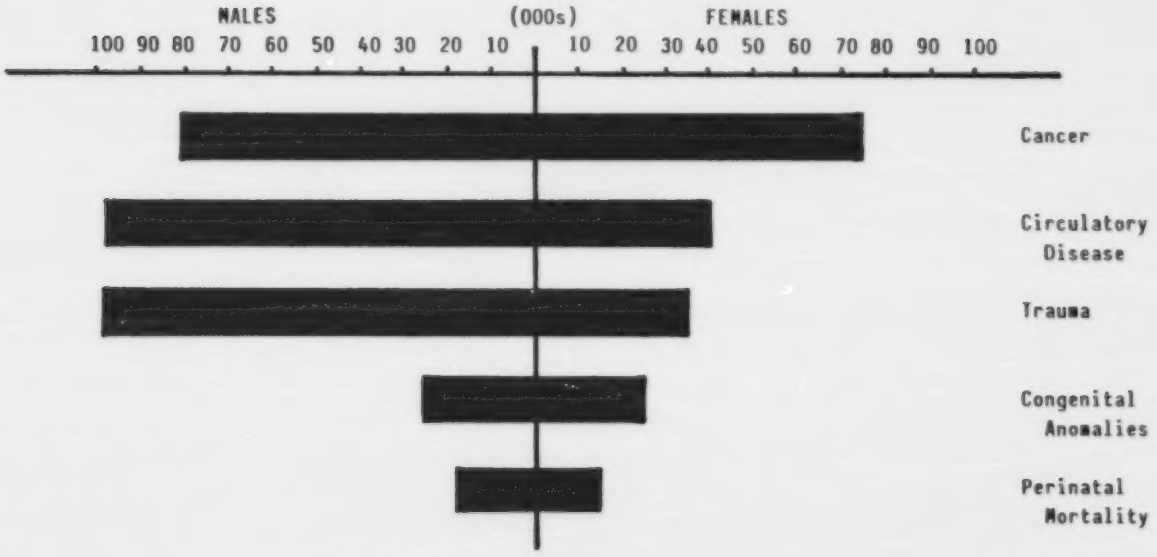
NUMBER OF DEATHS BY LEADING CAUSES,
ONTARIO, 1984



Source: Statistics Canada, Vital Statistics, Deaths, (84-206), 1984

EXHIBIT 6

POTENTIAL YEARS OF LIFE LOST* BY LEADING CAUSES,
ONTARIO, 1984

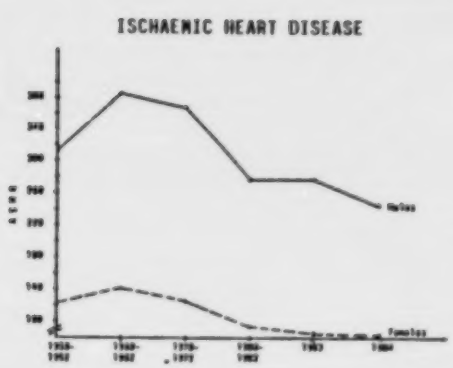


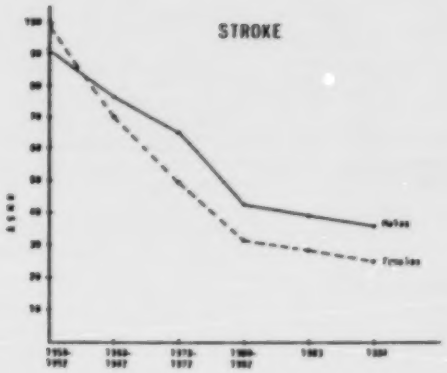
*using age 75 as expected life span

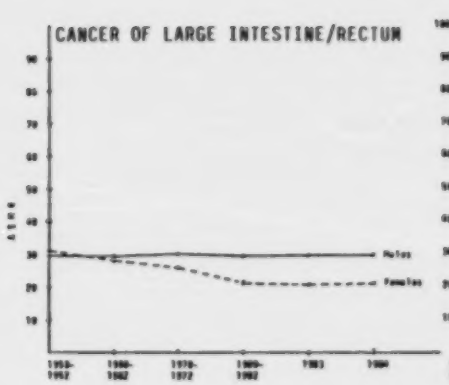
Source: Province of Ontario, Vital Statistics For 1984.

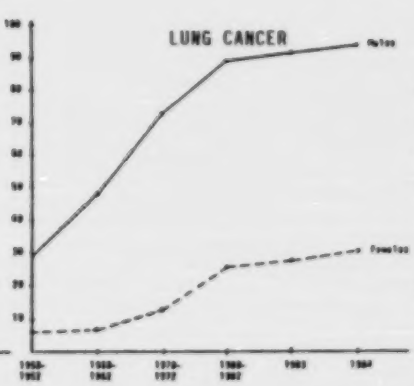
EXHIBIT 7

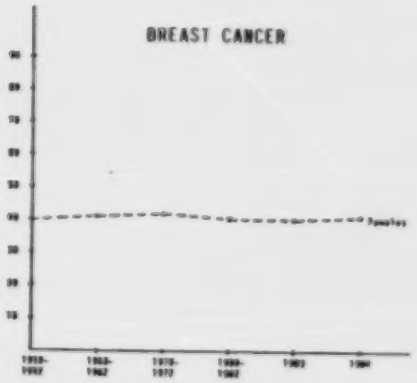
TRENDS IN LEADING CAUSES OF DEATH,
ONTARIO, 1950 TO 1984

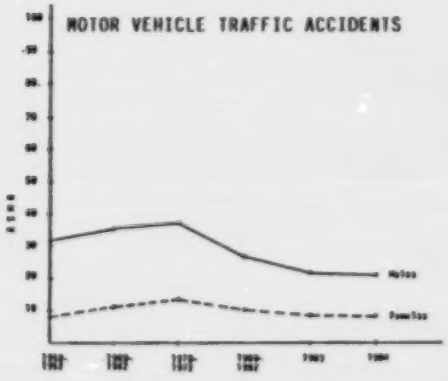


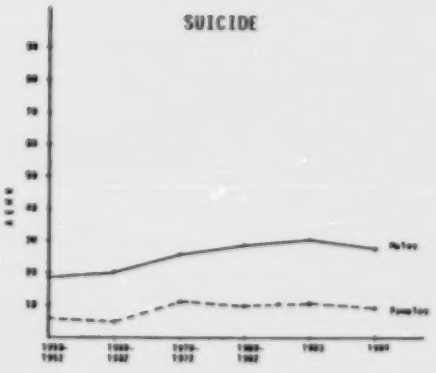






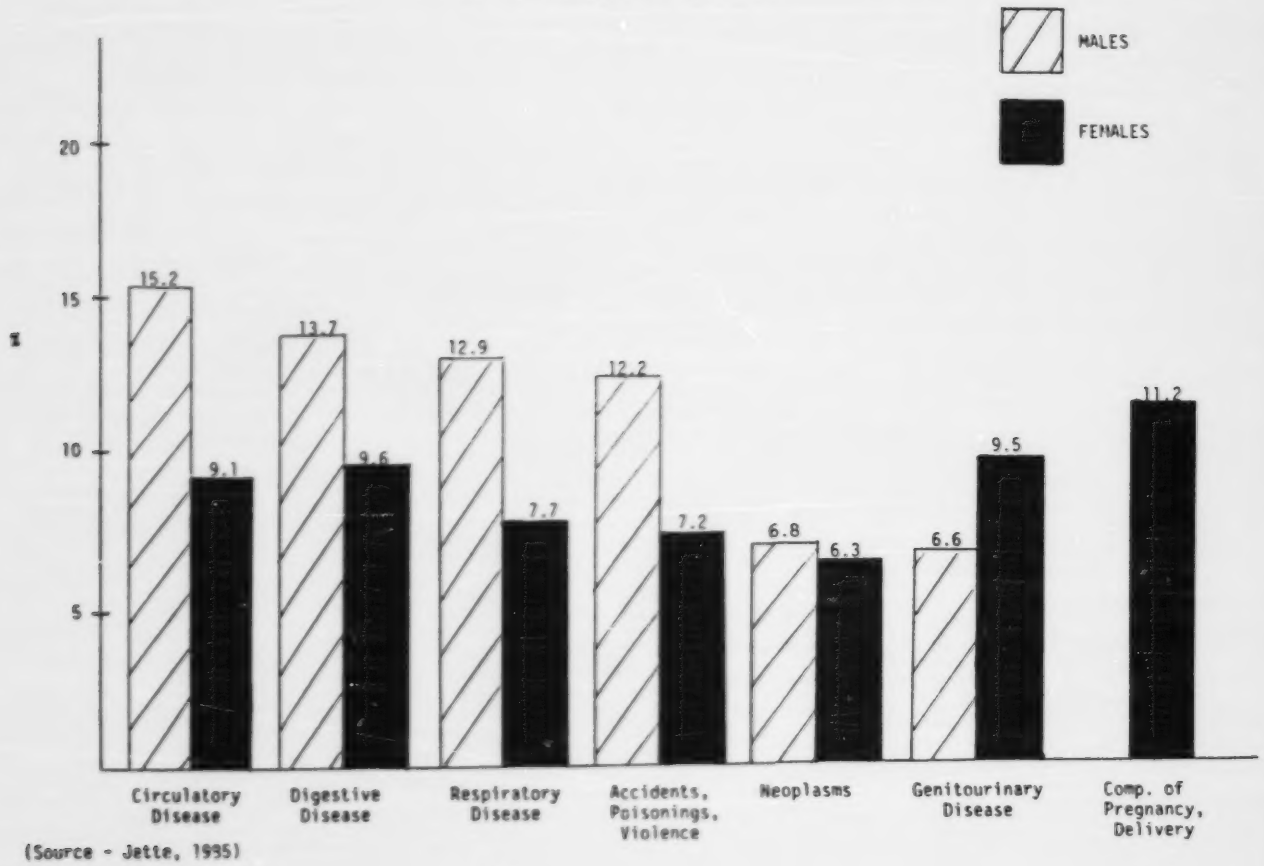






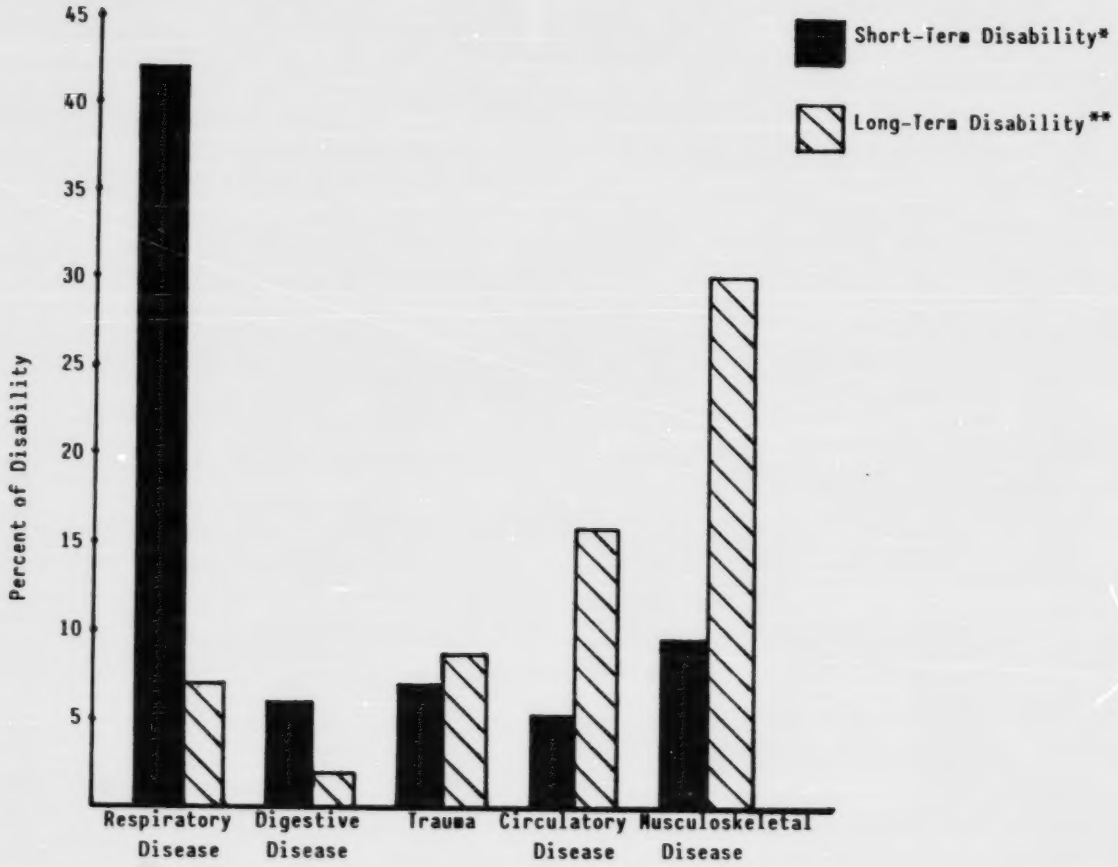
Source: Ku, Smith, Mao, Chronic Diseases in Canada, Dec.1986.

Exhibit 8
Major Cause of Hospital Admission (%)
All Age Groups, Ontario 1979-83



(Source - Jette, 1985)

EXHIBIT 9
CAUSES OF DISABILITY, CANADA, 1981



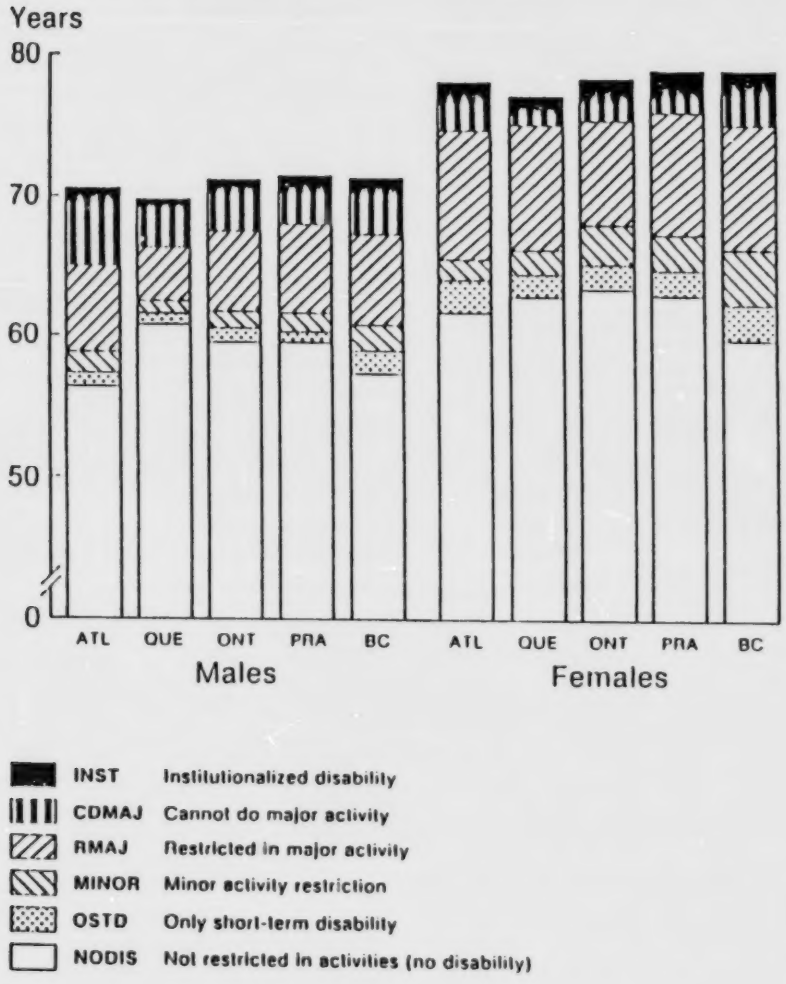
* Short-Term Disability refers to the individual's disability days during the two weeks prior to survey, and thus includes some chronic disability.

** Long-Term Disability refers to limitation of the individual's major activity during the twelve months prior to survey.

Source: Canada Health Survey, 1981.

EXHIBIT 10

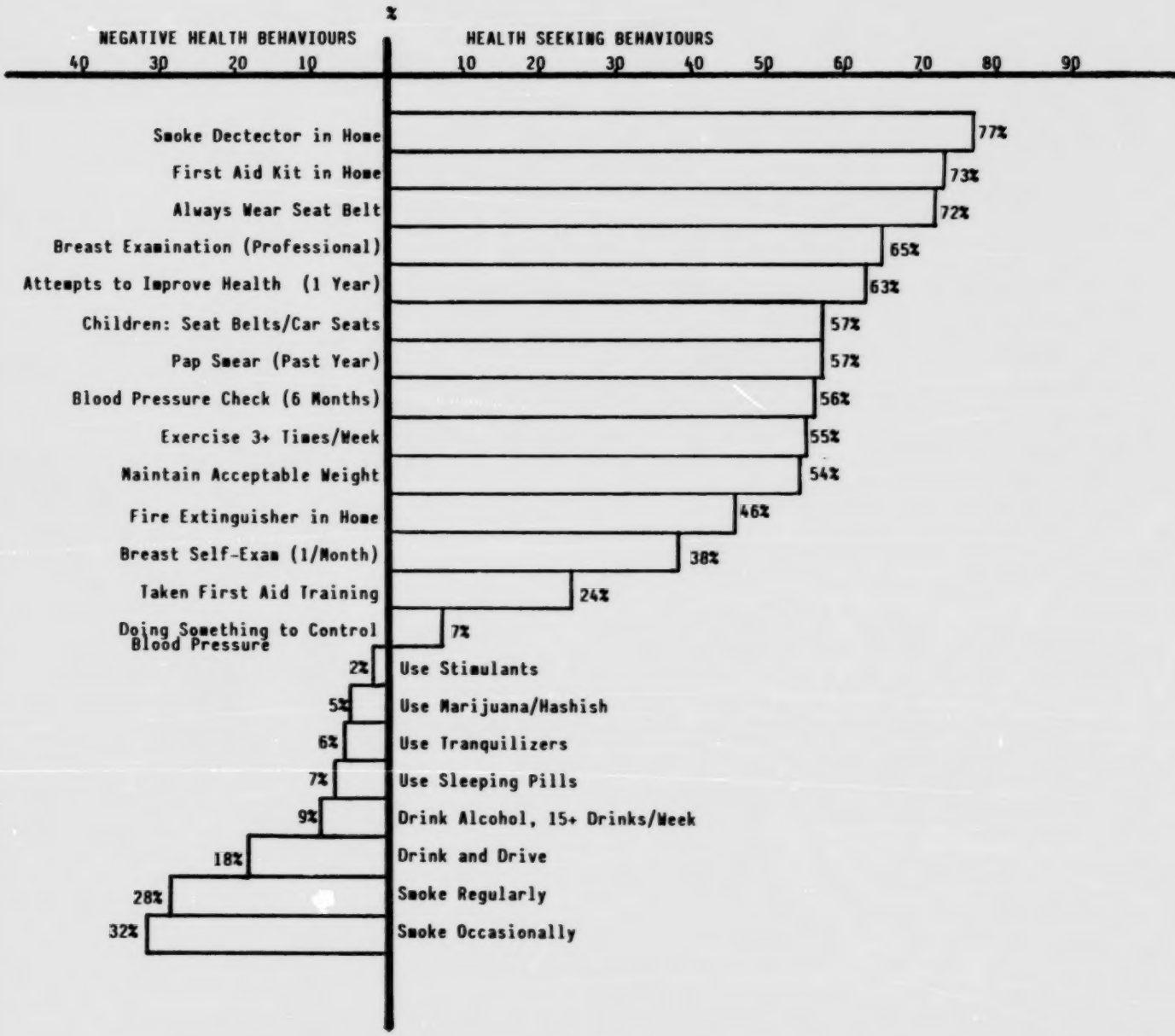
Health Expectancy by Region, by Sex, Canada, 1978



Source: Wilkins and Adams, 1983

EXHIBIT 11

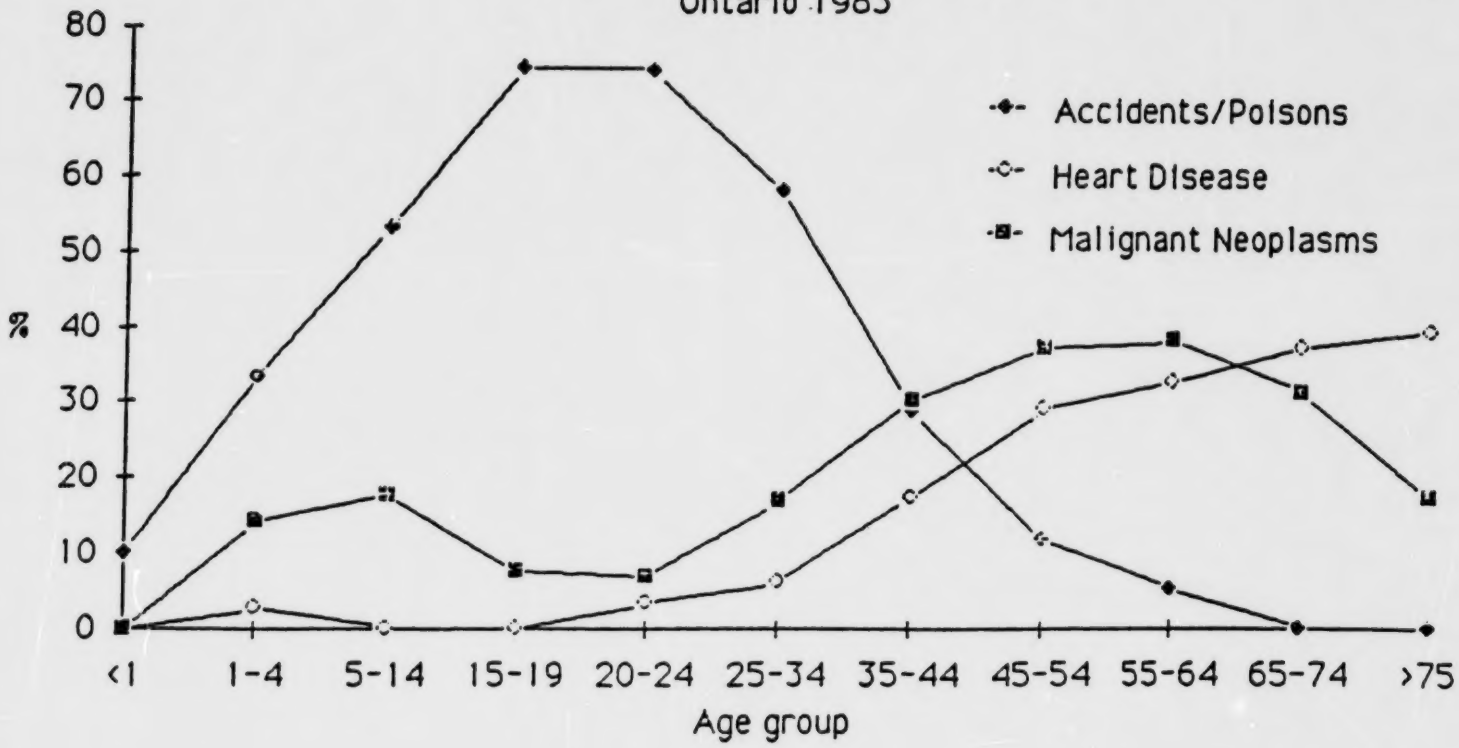
PERCENTAGE OF ONTARIO RESIDENTS PRACTISING POSITIVE AND NEGATIVE HEALTH BEHAVIOURS, 1985



Source: From Health Promotion Survey, Health and Welfare Canada, 1985.

EXHIBIT 12

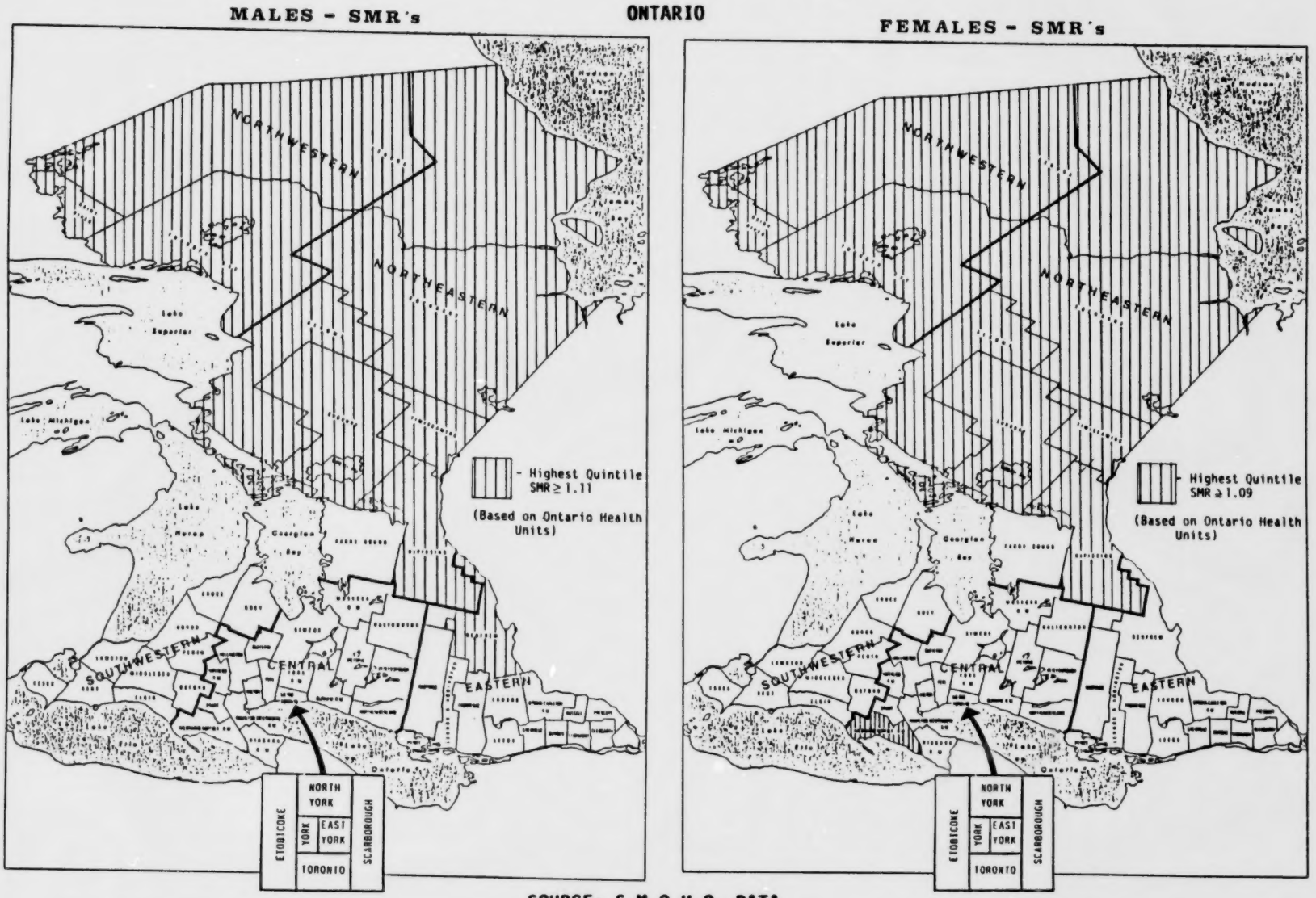
Chief causes of death (%) by age groups
Ontario 1983



Source: Jette 1985

Exhibit 13a

MORTALITY: ALL CAUSES, 1979 - 1983

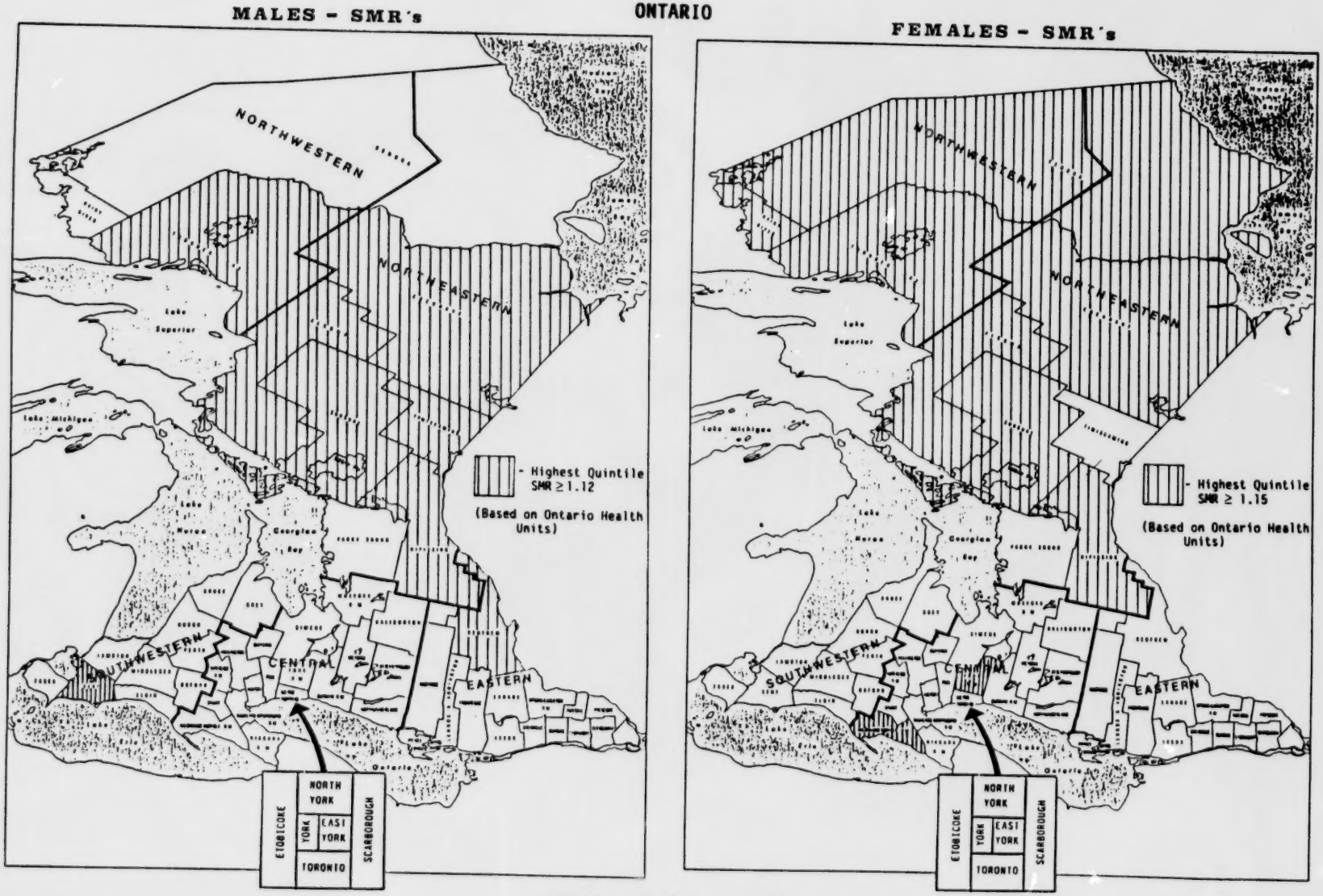


SOURCE: S.M.O.H.O. DATA

Exhibit 13b

MORTALITY: HEART DISEASE, 1979 - 1983

ONTARIO

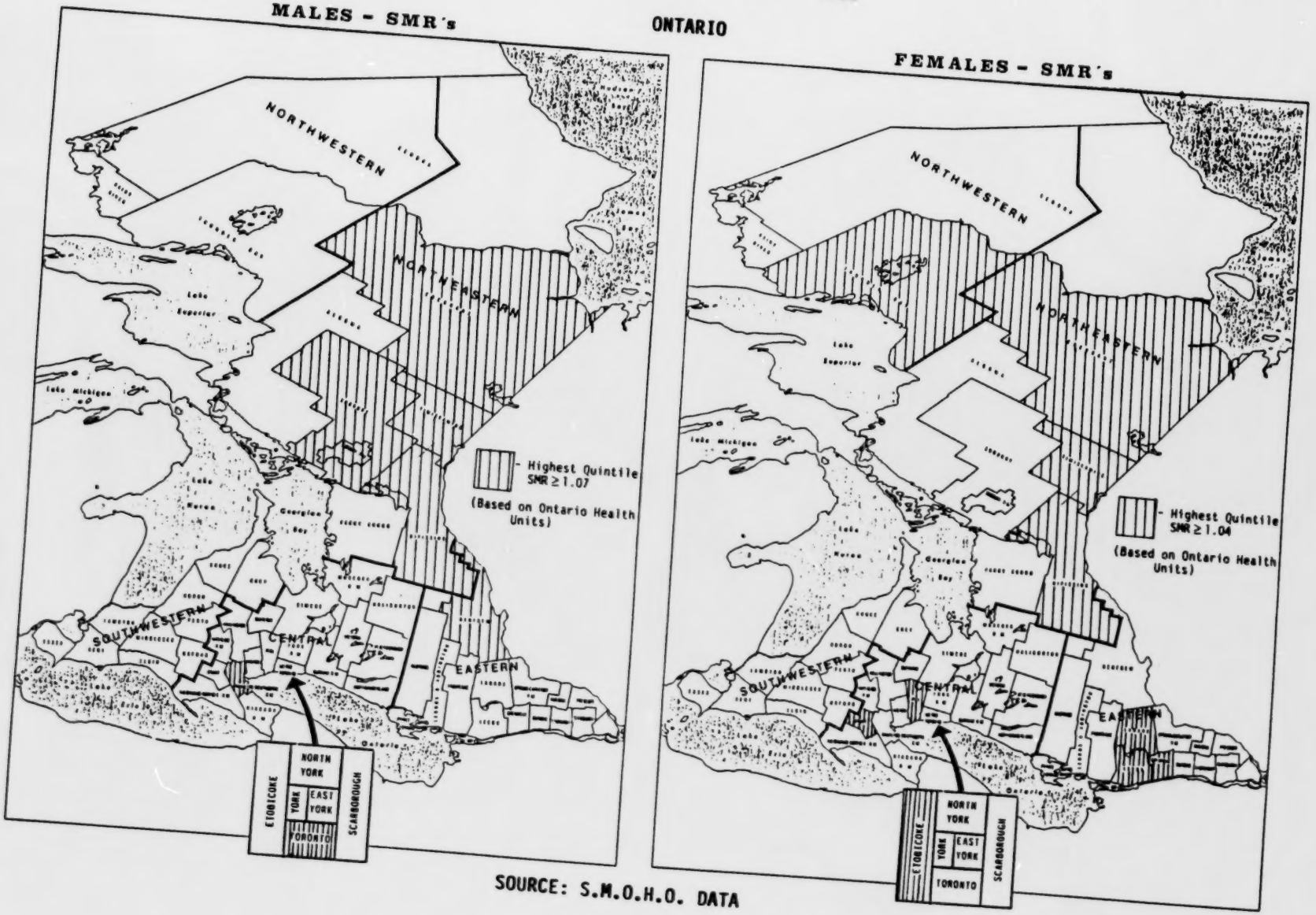


SOURCE: S.M.O.H.O. DATA

Exhibit 13c

MORTALITY: CANCER, 1979 - 1983

ONTARIO

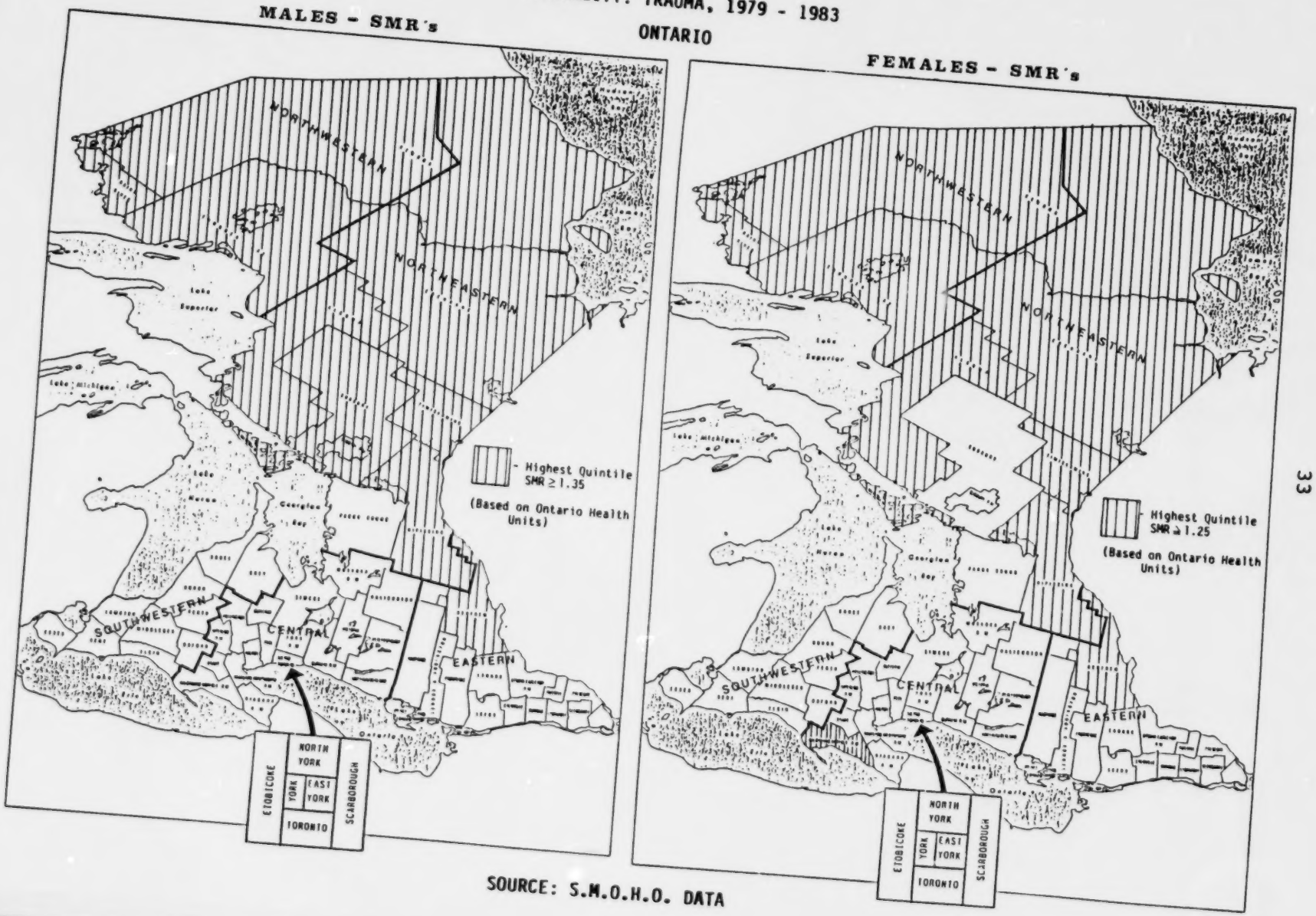


SOURCE: S.M.O.H.O. DATA

Exhibit 13d

MORTALITY: TRAUMA, 1979 - 1983

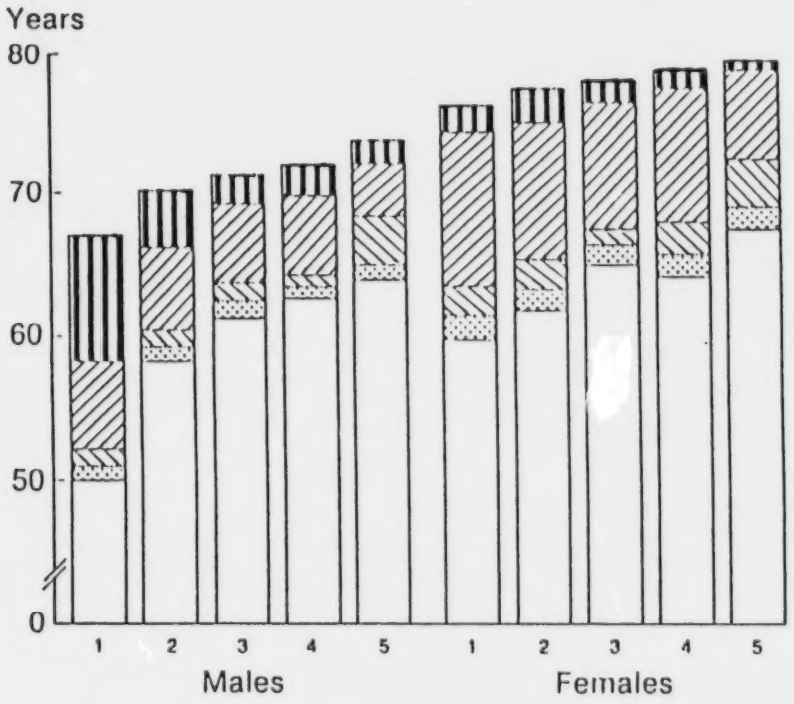
ONTARIO



SOURCE: S.M.O.H.O. DATA

EXHIBIT 14

Health Expectancy by Income Level, by Sex, Canada, 1978



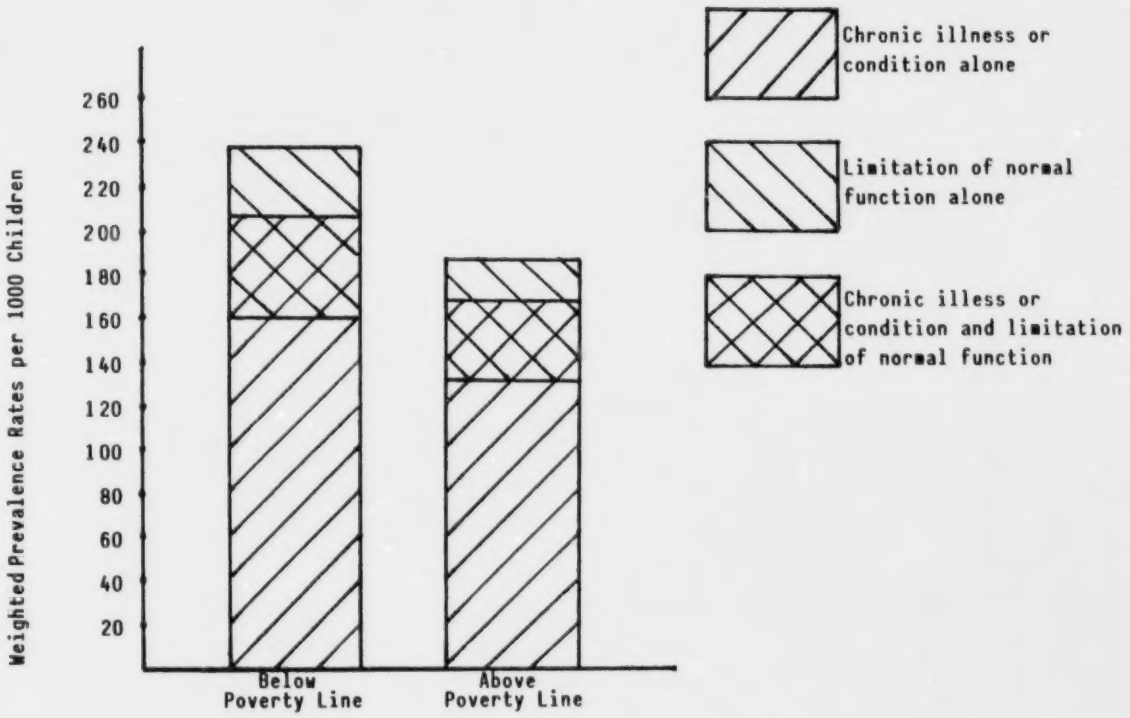
Notes: Income levels are as follows:

1. Lowest quintile
2. Second quintile
3. Third quintile
4. Fourth quintile
5. Highest quintile

Source: Wilkins and Adams, 1983

EXHIBIT 15

WEIGHTED PREVALENCE RATES OF CHRONIC HEALTH PROBLEMS
PER 1000 CHILDREN, ONTARIO, BY SOCIOECONOMIC STATUS

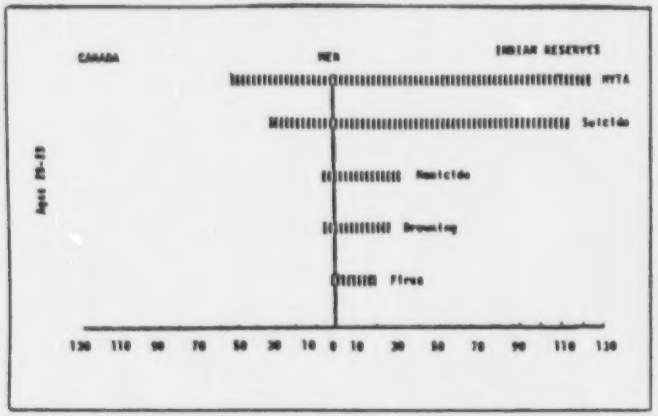


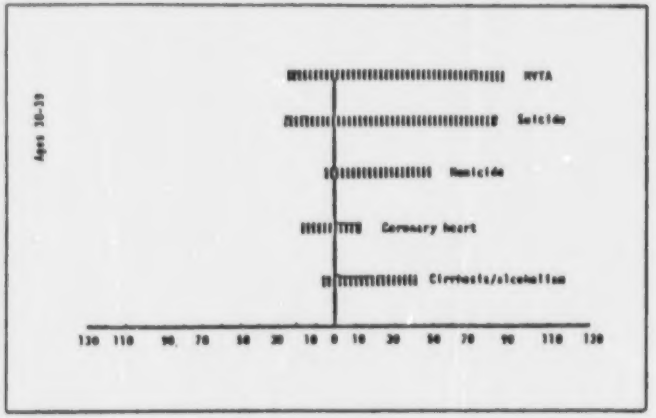
Source: From Cadman, 1986

EXHIBIT 16

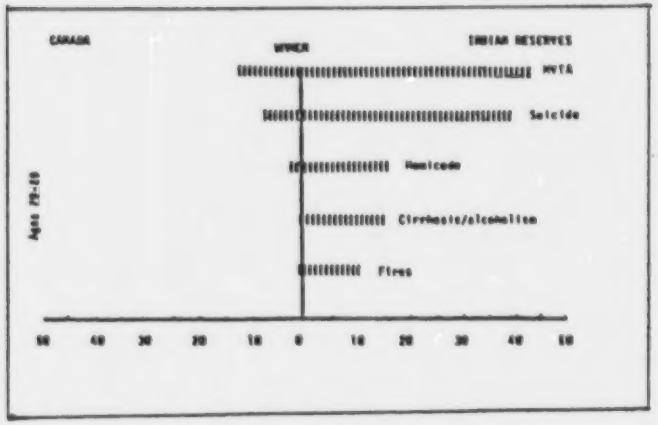
AGE SPECIFIC MORTALITY RATES PER 100,000 POPULATION,
INDIAN RESERVES
1977 - 1982

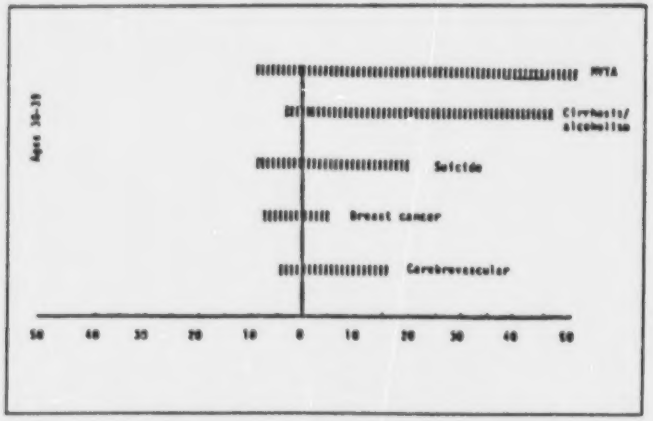
MALES





FEMALES

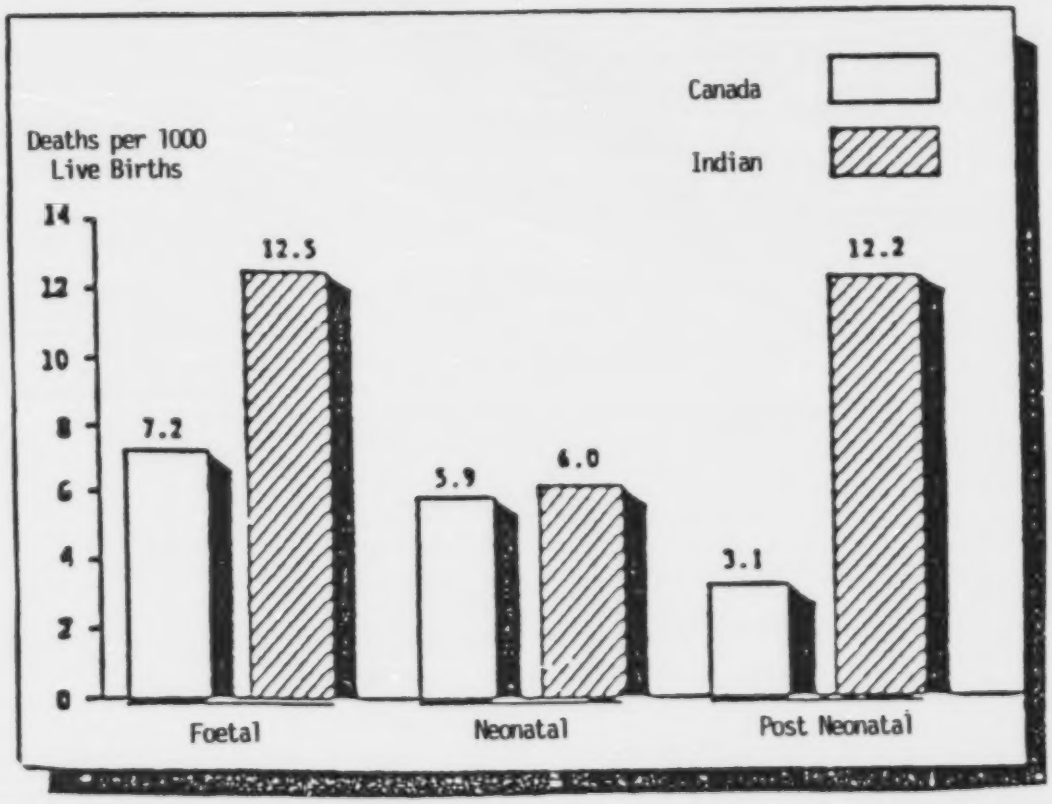




Source: Morrison, Semenciw, Mao, and Wigle, Canadian Journal of Public Health, 7:4.

EXHIBIT 17

INFANT MORTALITY, INDIAN AND CANADIAN POPULATION
1983



Source: Health and Welfare, Medical Services Branch, 1985

III. DEVELOPMENT OF HEALTH GOALS

A Framework for Health Goals

The Panel has considered the health goals along two dimensions, as summarized in the accompanying matrix, which also indicates the number of goals proposed for each cell.

FOCUS OF HEALTH GOALS	LEVEL OF HEALTH GOALS			
	BROAD GOALS	SUB-GOALS	OBJECT-IVES	TARGETS
EQUITY	1	3		
OUTCOMES	2	12		
DETERMINANTS	3	15		
STRATEGIES	1	(11)*		

Each of the dimensions will be spelled out in detail.

Focus of the Health Goals

The Panel based the development of the health goals on its vision of a healthy Ontario (Chapter I), by considering what needed to be done to achieve this vision.

Equity in Health. Equity is a guiding principle of Canadian society, as exemplified by our development of such programmes as unemployment insurance and national health insurance. The need for equity in health emerged as a dominant theme in the review of health data, in the submissions from organiz-

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* Instead of identifying sub-goals at this level, it has been considered more appropriate to identify specific strategies.

ations, and in the Panel's deliberations. It is therefore stated as the first goal area.

Desired Health Outcomes. The Panel proceeded to define a healthy Ontario in terms of desired health outcomes. These outcome goals fall into a hierarchy, in which promotion of health is the highest priority, followed by prevention of disease, and then by prevention of premature death. At the same time, this hierarchy recognizes the need to achieve maximum possible health for those who are not healthy, in terms of quality of life for the sick and disabled. Efforts to improve health are dependent upon an understanding of the determinants of health and disease, so a short discussion of these factors is included for each goal, leading to a suggestion of approaches for achievement of the goal.

Health Determinants. Next, the Panel developed goals addressing the determinants of health. The health field approach of the New Perspective was used to structure a listing of environmental factors, behaviours, and health services factors which must be changed in order to achieve the desired health outcomes (human biology was not listed separately, but was referred to under health services and later under research). Note that "non-health" factors such as agriculture and income are included in this model, as well as community factors and individual factors such as attitudes to health and risk-taking. Since many determinants are often linked to a single cause, and vice versa, emphasis has been placed on determinants which are related to a number of important outcomes and which are subject to intervention. McGinnis suggests that goals related to determinants are the most important step in the goal-setting process, since they lead directly to programme development[27].

Strategies. Defining goals is necessary but not sufficient: it is essential also to identify initiatives which must be taken to achieve these goals. Accordingly, certain broad strategies* have been identified which can contribute to the desired changes in health determinants.

From Goals to Objectives

Within each of the above headings, several "layers" of goals can be defined, ranging from the very general to the very specific. The distinction between these levels is somewhat arbitrary.

Broad Goals. At the initial stage of the goal-setting process, broadly stated goals were defined. These broad statements serve to organize the presentation and set the tone for the ensuing discussion. They can serve as guide-posts against which more specific ideas can be tested. The Panel has developed a total of seven broad goals, relating to the topic areas listed above.

Sub-Goals. Each broad goal has been elaborated into several sub-goals, dealing with specific health opportunities and problems. These are needed to focus efforts at health improvement, by giving more specific guidelines to policy-makers and programmers. In developing these sub-goals, the following criteria have been considered, although not in a quantitative way:

* Contribution to the broad goals, especially:
  - focus on equity
  - potential to enhance quality of life

---

* A **strategy** delineates the path that an organization intends to follow in achieving its objectives. It is thus a means to a desired end.

* Opportunities for intervention:
  - quality of evidence regarding causation, recognizing that high quality evidence is not a sine qua non for inclusion of a goal
  - feasibility of intervention, especially prevention

* Public perceptions and priorities.

This process led to the selection of specific topics (conditions, environments, behaviours, etc.) which in the judgement of the Panel are the most appropriate subjects for sub-goals in Ontario at present. Topics which have not been assigned a specific sub-goal, usually because of low burden of ill health or lack of amenability to prevention, can often be subsumed under other sub-goals. The sub-goals have not been arranged in order of priority.

Objectives. The health goals recommended here must be converted to specific, measurable objectives before they can be used to assess progress toward achieving health, and indicators must be identified to permit measurement of progress. Development of these detailed objectives should <u>follow</u> acceptance of the goals set out in this project. The process will usually require considerable subject expertise, and thus should generally be undertaken by expert groups.

Targets. An objective provides a method of measuring progress, while the corresponding target defines the amount of change which is to be achieved, and the time by which it is to be achieved. Selection of target achievements and completion dates should reflect local situations and opportunities, and thus requires substantial local community input.

Use of Life-Stage Approach

Several goals projects have used a life-stage approach to organize their work, and thus defined goals for various age groups. The Panel has identified several problems with this approach. It tends to use uniform age groups for all goals and objectives, when ideally different cut-points should be used for different purposes. More important, the approach makes it difficult to acknowledge that efforts to improve the health of one age group must often be directed at younger age groups. The Panel has therefore decided not to organize its proposed goals in this way, although it recognizes that this approach is often useful at the programme planning level. It is essential that specific objectives address the extremes of life, i.e., the perinatal and infant periods and old age. For example, sub-goal 3.2, which deals with trauma, has obvious applicability to all age groups. Specific objectives would deal with household accidents in early childhood, motor vehicle crashes throughout most of the lifespan, occupational injuries in adulthood, and falls in old age.

IV. HEALTH GOALS FOR ONTARIO

Prerequisite for Health

Health cannot be achieved unless people can live in an atmosphere of peace, free from war and the fear of war. This consideration over-rides even equity, to address the preservation of life itself. Thus, efforts to maintain world peace are the most basic health programmes. Community organizations and individuals play a significant role in this initiative, while the work of International Physicians for the Prevention of Nuclear War is an outstanding example of the contribution of health professionals. Although international relations are a federal responsibility, the provincial government can urge the federal government to work for peace, and can take such initiatives as declaring the province a nuclear weapons-free zone.

Equity in Health

GOAL 1 ACHIEVE EQUITY IN HEALTH OPPORTUNITIES.

The Panel uses the word "equity" to refer to justice or fairness. Equity in health implies that members of all population groups have equal opportunities to achieve and maintain health. Society has a collective responsibility to ensure equity through its public policies and its allocation of resources. Thus, equity is a moral value, an idea which is explicit in the Ottawa Charter on Health Promotion.

In contrast, "inequality" in health refers to measurable differences in health amongst various population groups. For example, inequality in structural factors such as employment, education and income determine an individual's ability to obtain suitable housing, food, clothing,

etc. In turn, these factors can contribute to differences in health behaviours and health status.

Equity in health opportunities does not necessarily result in equality in health status. The latter is impossible to achieve, since some determinants of health cannot be controlled (e.g., genetic factors). However, the Panel believes that the observed inequalities in health status among Ontarians are due at least partly to unequal opportunities for health, and therefore concludes that inequities exist. By giving members of all population groups an equal opportunity to achieve their health potential, we should be able to reduce existing differences in health status between various groups in society, whether they be defined in terms of geography, income, gender, ethnicity, or other factors. It should be clear that equity means much more than equal access to health services. Equal access to health care services cannot compensate for the quite unequal risks of becoming ill or disabled.

The issue of equity is well exemplified by infant mortality, particularly post-neonatal mortality. Although the rate is low in Ontario as whole, there are important and unacceptable disparities among population sub-groups (e.g., natives, the poor), which must be reduced or eliminated.

Although three sub-goals dealing specifically with equity are presented below, the theme of equity is also taken up in many of the goals to follow later.

1.1 Provide all Ontarians with equal opportunities to attain health.

Problem Statement. The opportunities referred to in this sub-goal include education, information, nutrit-

ion, and others, but the discussion will focus on income because of the importance of that variable. According to the National Council of Welfare, 10% of families and 32% of unattached individuals in Ontario were poor in 1985[28]. One child in five was growing up in poverty. These figures had improved slightly over the previous two or three years, thanks to improvements in social programmes and reductions in unemployment, but were still higher than in 1980.

Some groups experience higher rates of poverty than others. Women are more severely affected in nearly every category, and have benefited least from the improvements since 1980. In 1985, 47% of Canadian families headed by women aged less than 65 were poor, as were half of unattached older women. Almost half of unattached youth were living below the poverty line. Disabled persons are severely disadvantaged with respect to income, with 44% of those receiving individual incomes earning less than $10,000, and another 9% reporting no income at all[29]. Disabled women fare worse with respect to income: 62% of disabled women reported no income or incomes less than $10,000, compared to 43% of disabled men. 46% of those severely disabled under the age of 65 do not receive a disability income.

Despite the overall improvement, the position of the lowest income groups has continued to deteriorate. Those who make the minimum wage have moved from being on the poverty line to being 25% below the poverty line[30]. The number of Ontarians who collected welfare increased by 32% between 1981 and 1985; in certain metropolitan areas the increases were much more pronounced.

The number of homeless individuals is increasing steadily. Twenty years ago the homeless were middle-aged, multi-problem, unemployed men; recent data suggests that more are under thirty, women, families and deinstitutionalized psychiatric patients[31].

Individuals in lower income levels have much higher rates of premature mortality than those in the higher income levels[20 32]. The prevalence of mental disorders and heart disease is higher among the lower income groups. There is also a disproportionate burden from disability due to back, limb and joint disorders and arthritis[33]. Poor children have more psychiatric disorders and chronic health problems, poorer school performance, and lower participation in extra-curricular activities than their higher income counterparts [22]. In the Nutrition Canada Survey, poor children were found to be at higher risk for nutritional disorders and deficient intake of essential vitamins[34].

Action Implications. Achievement of this goal requires that every Ontarian have adequate education, income, nutrition and housing. Programmes and environments which promote healthy behaviours, empower individuals and communities, and otherwise support health must be available to all Ontarians. Until equity is achieved, this sub-goal goes further to imply the need for affirmative action to enable the disadvantaged to reach their potential: an equal share of health-promoting resources is often not enough.

1.2 Provide all Ontarians with adequate protection from risks to health.

Problem Statement. While the previous sub-goal considers the opportunities to achieve health, this one considers risks to whatever level of health has been attained. At present, Ontarians are subject to quite different levels of risk, by virtue of their varying chances of unemployment, their exposures to hazards in the general environment (water, air and soil pollution), housing and the workplace (presence of toxic agents or risk of injuries), or their exposure to communicable diseases.

Poor children and in particular poor native children are at greater risk for infectious diseases, particularly respiratory infections. Although the incidence of tuberculosis has declined, it is still a concern for some native and immigrant communities.

Action Implications. Government action is required to reduce the unacceptable risks to health which are experienced by many Ontarians. This includes provision of affordable housing, rigorous enforcement of pollution controls, and ensuring of safe workplaces.

1.3 Ensure equitable use of health care services.

Problem Statement. The concept of equitable use (not equal use) means that health services utilization should be determined primarily by need, and not by age, gender, income, or other characteristics of individuals. Our universal health insurance programme is a powerful resource, and there is evidence that is there are relatively few differences in admission rates among

income groups[35]. However, groups with poorer health require a disproportionate amount of health services, in order to meet their greater needs. Some financial barriers remain, such as transportation and charges for various services in hospitals. Non-financial barriers are more ubiquitous. Residents of rural and remote areas suffer from limited access to health services. Powell found marked variations in access to therapeutic abortions[36]. Cultural or language differences make health services less accessible to some populations.

Action Implications. User charges must be eliminated, and non-financial barriers such as distance, hours of operation and language reduced. Services located in and accountable to local communities will be more responsive and accessible to local residents, as discussed in goal 6.3.

Health Outcomes

Goal 1 dealt particularly with differences in health among various groups in society, but has touched on many of the variables to be discussed in the later goals, which refer to society as a whole. Goals 2 and 3 both deal with health outcomes, goal 2 with promoting health and goal 3 with preventing deterioration in health.

GOAL 2 ENABLE ONTARIANS TO ACHIEVE THEIR HEALTH POTENTIAL

Quality of life is an essential component of health, and requires that we ensure the full development and use of people's physical and mental capacity, at all stages of life. A healthful life is much more than freedom from illness and disability. Health is an asset, a resource

which gives people and families the ability to lead productive and satisfying lives. It implies a holistic concept of well-being -- mental, emotional, spiritual as well as social -- and goes beyond a medically defined healthy body to include elements such as joy in living and full community participation[37]. Improved quality of life will aid in physical and social adaptation to stressful life events, and will likely have a more favourable impact on many chronic diseases, e.g., mental illness, than will attention given to specific risk factors.

If people are to achieve their health potential they must be given a good start in life, beginning with their prenatal development. They must then be given the best chance possible to develop health, and to maintain it throughout life. This goal challenges all citizens, regardless of their level of health and ability.

The Panel recognizes the difficulty of measuring concepts like "quality of life", but has been prepared to include them in the list of goals despite this problem. Quality of life can be assessed by such indicators as social relationships, type of housing, living arrangements, leisure activities, education, income, employment status and self-esteem[38].

2.1 Empower people to gain greater control over their health.

Problem Statement. Achievement of optimal health requires positive individual and community choices and an appreciation that all actions, thoughts and feelings have an impact on one's state of health[39]. This requires that people be empowered, i.e., that they be positioned so that they can act on health issues, if

they choose to do so. People cannot achieve their fullest health potential unless they are able to take control of those conditions and behaviours which affect their health.

Action Implications. The process of taking control over health is enhanced through favourable and supportive social environments and through opportunities to make healthful choices[9]. Thus, the ideas on supportive communities, to be developed in goal 4.2, are relevant here. Meaningful public participation and use of strategies such as advocacy and community development can strengthen community involvement in managing local health challenges. Different groups have different problems and may find different solutions, indicating a need for flexibility and diversity of approach. Governments must provide the necessary resources, but must also transfer authority for use of these resources to local communities, where appropriate. Community right-to-know legislation is also a key part of this empowerment.

2.2 Support individuals to adopt a healthful lifestyle.

Problem Statement. While goal 2.1 dealt with empowerment (taking control over health), this goal deals with actions. It refers to a positive, "holistic" approach to life in general, and thus goes beyond the specific behaviours to be discussed in goal 5. Positive and successful learning experiences throughout life enhance self-worth and promote skills and confidence in decision-making, responding to the challenges of daily life, and conflict resolution. These skills are also relevant to the idea of meeting the challenges of chronic illness and disability, as discussed under goal

3.9.

Action Implications. The creation, maintenance and recovery of one's highest potential for well-being requires full access to information and education for health, and the development of personal life skills for managing the future. Achievement of full health potential can be facilitated by a system of incentives and rewards, but should never lead to victim blaming for those individuals who fail to adopt healthy practices. We must create environments in which people can make healthy choices. An example is the approach commonly used in birth control clinics, of supporting teen-agers by encouraging them to adopt a responsible decision framework for sexuality, reproduction, and child-rearing.

The efforts leading to personal well-being which are outlined in this goal area will also contribute to the development of a caring community, and vice versa.

2.3 Encourage participation in a broad range of meaningful activities.

Problem Statement. Integral to a well-balanced and healthy life are freely chosen and meaningful work and leisure experiences. Given that most people spend a large proportion of their waking hours at work, it is not surprising that people often identify themselves with their work. The work environment should not only be safe, as elaborated in goal 4.3, but should contribute positively to health. But the rest of the waking hours are also important, and are the focus of this goal. Technological devices such as home appliances

and changing patterns of work such as shorter work weeks and job sharing have provided people with more discretionary time than ever before. This time can be used for a variety of leisure activities ranging from sports, hobbies and the arts through social and religious activities, to education and other personal improvement projects. Volunteering is a particularly desirable leisure activity, since it benefits others as well as the volunteer. Fulfilling use of leisure time promotes individual, family and community harmony and well-being.

Leisure is a good in itself, but is also a means of coping with the stresses of everyday life. Sometimes the free time is involuntary, as in the case of temporary assignments, lay-offs or unemployment. Other populations facing forced free time include retirees, disabled persons and home makers. In these cases, leisure pursuits can play a key role in combatting potentially negative psychological effects[40].

Action Implications. A range of leisure activities, both active and passive, must be available through community delivery systems. Options for all ages, both genders, and ethnic and disenfranchised groups are required, along with appropriate support systems such as child care to enable single parents to participate[41].

GOAL 3 INCREASE THE HEALTH EXPECTANCY OF ONTARIANS

Goal 2 focused on promoting health, while this goal calls for reductions in health problems. Health expectancy refers to life expectancy in good health, free of significant disease or disability[20]. This concept has two compon-

ents: reducing premature mortality and reducing morbidity and disability. These have been presented within a single goal, because of the similarity in causal factors and possible interventions.

The Panel recognizes the difficulty and the value judgement implicit in deciding whether a death is premature; the appropriate cut-off depends upon the situation (e.g., the life expectancy in the population) and the quality of the life which is lost. The quality of the life being saved should be a primary consideration in deciding whether a death is premature, and whether technology should be used to delay it.

This goal also incorporates the idea of increasing the number of years people live free of major disease and disability, i.e., reducing disease, disability and handicap. Where impairments do occur, they should be prevented from turning into disabilities (restrictions in people's normal activities) or handicaps (people's ability to fulfil their economic and social roles). There is no biological reason why the vast majority of people should not lead active and fulfilling lives, free of disability and handicap, to an advanced age[42]. Morbidity and mortality can be reduced through reduction in the incidence of disease or injury, early detection and effective intervention, or effective treatment. In general, reduction of incidence (primary prevention) is preferable, since it eliminates all morbidity.

The following sub-goals could be priorized in various ways, e.g., by Potential Years of Life Lost, by economic burden, or by community preference. The Panel believes that the priorization is best carried out by communities, so the sub-goals are not arranged in any particular order here.

3.1 Reduce morbidity and mortality from circulatory disease.

Problem Statement. Circulatory disease is the leading cause of mortality in our population, accounting for 46% of all deaths and 21% of all Potential Years of Life Lost in 1984[43]. Ischaemic heart Disease (IHD) itself caused 30% of all deaths and 15% of all Potential Years of Life Lost, while stroke accounted for 8% of deaths and 3% of Potential Years of Life Lost. Circulatory disease is also a leading cause of morbidity, resulting in 12% of all hospital admissions and 17% of all days of care in 1984, and 14% of all disability in the adult population[44]. Thus, it is not surprising that it was found to be the leading category in a 1971 Ontario study of the economic burden of ill health[45].

Action Implications. Although the trend in both these conditions is downward, we need to accelerate this trend. Evidence from several studies (e.g., North Karelia[46]) indicates that community programmes can do this by reducing smoking, controlling blood pressure, modifying diet, controlling obesity and increasing exercise. These approaches are addressed in Goals 4, 5 and 6.

3.2 Reduce morbidity and mortality from trauma.

Problem Statement. Because it so often affects young people (causing 68% of all deaths in persons aged 5-29 in 1984), trauma is a leading cause of Potential Years of Life Lost - 20% of all PYLL in 1984. Injuries also cause a large burden of morbidity (8% of hospital

admissions and 9% of days of care in 1984-85) and especially disability (15% of the total)[47]. Trauma was second to circulatory disease in the 1971 study of the economic burden of ill health[45].

Motor vehicle crashes are by far the leading category, themselves causing 7% of Potential Years of Life Lost in 1984 (33% among persons aged 15-29, 41% among persons aged 15-19). Other types of trauma also result in a large burden of morbidity and mortality. Occupational injuries take an unacceptable toll of workers, with 172,000 injuries and 176 deaths in 1984, causing the loss of some 6 million days from work[24], and accounting for 7% of all disability in the Canadian adult population[29]. Falls are a major cause of disability in older people, with hip fractures the most serious result, and cause 48% of all traumatic deaths in the elderly[48].

Action Implications. Injuries are an excellent example of a problem where a multi-pronged approach is needed. In the case of motor vehicle crashes, we know much about the risk factors, which include use of alcohol and other drugs, excessive speed, inexperience, and failure to use seatbelts, carseats, and motorcycle helmets[49]. Design and condition of road and vehicle are also important. Legislation and regulation can have a major impact on vehicle and road design, and can also influence behaviour, but the potential of these approaches has scarcely been tested. These factors are addressed in Goals 4 and 7, while behavioural approaches are discussed in Goal 5. Occupational injuries are discussed under goal 4.3. Falls in the home can be reduced by education and environmental manipulation.

3.3 Reduce morbidity and disability from mental health problems, and reduce the rate of suicide.

Problem Statement. Although there is debate about the exact prevalence of these problems, there is no doubt that they cause a very large amount of morbidity and suffering. Psychiatric conditions accounted for 5% of all discharges from Ontario hospitals (general and psychiatric) but for 21% of all hospital days during 1984. Addictions to alcohol and psychoactive drugs are included in these data, although they are discussed in this document mainly under Goal 5.2. Suicide caused 18% of deaths among persons aged 15-34, and accounted for 5% of all Potential Years of Life Lost in the population as a whole. Despite a recent decline, suicide rates in Indians are 4 to 7 times higher than in the general population, among persons aged 15-29[50]. Suicide is therefore an important equity issue.

Action Implications. We do not know a great deal about the causes of mental illness, so the role of primary prevention is uncertain; research into causation should be a priority, as should research into the effectiveness of various coping skills in preventing mental health problems. Coping ability refers to being able to use social and psychological resources and specific adaptive or learning responses to prevent or control potential harm from crises or everyday life strains. Efforts to enhance coping ability involve education and counselling that result in the use of these protective measures for preventive, adaptive or restorative purposes. The approaches noted under Goal 2 should have an important non-specific effect in preventing mental health problems, while identification of high-risk groups and provision of appropriate support

services should help prevent progression of such problems. Tertiary prevention is very important here, through provision of improved services for long-term psychiatric problems in the community.

3.4 Reduce morbidity and mortality from cancer.

Problem Statement. Unlike circulatory disease and trauma, cancer incidence and mortality are gradually increasing, mainly because of the epidemic of lung cancer. Cancer accounted for 26% of all deaths in Ontario in 1984, and for 24% of Potential Years of Life Lost. In terms of morbidity, it accounted for 7% of hospital admissions and 10% of days of care in 1984-85. Doll and Peto[51] suggest that 30% of all cancer deaths may be attributable to tobacco, 35% to diet, 3% to alcohol, 7% to reproductive and sexual behaviour, and 6% to environment, whether occupational or general. Unprotected exposure to sunlight is an important precursor of skin cancers, which are the commonest of all cancers, although they are rarely fatal.

Action Implications. Prevention of many types of cancer is more feasible than cure[52]. Prevention of smoking is the biggest single factor, but dietary modification and protection from exposure to hazard agents (chemicals, radiation, excessive sunlight) are also important. These factors are addressed below, under Goals 4 and 5. Early detection is probably effective for at least breast and cervical cancers (Goal 6), and treatment is becoming more effective for several cancers.

3.5 Reduce morbidity and mortality from chronic respiratory disease.

Problem Statement. Chronic respiratory disease is an important cause of both morbidity and mortality, causing 7% of deaths and 3% of Potential Years of Life Lost in 1984, along with 4% of chronic disability days in 1983-84[47]. Although found mainly in men at present, it will become much more common in women, because of their recent smoking habits.

Action Implications. Smoking is by far the biggest risk factor, although air pollution and occupational exposures are also factors[53]. Elimination of smoking (Goal 5) and reduction of air pollution (Goal 4) are needed to reduce the burden of chronic respiratory disease.

3.6 Reduce morbidity and mortality from communicable diseases.

Problem Statement. This sub-goal refers to a large number of diseases, but emphasizes the vaccine-preventable childhood diseases, sexually transmitted disease (STDs), and especially the Acquired Immuno-Deficiency Syndrome (AIDS). The latter is the archetypal communicable disease, illustrating nearly all aspects of epidemiology and control. It has therefore been discussed in more detail.

AIDS illustrates the continuing potential of communicable disease to cause widespread morbidity and mortality. Ontario had 40% of Canadian cases in 1985[54], of which 81% occurred in homosexual or bisexual men. The disease is uniformly fatal. It is already

the leading cause of death in young males in some cities, and no one can accurately predict its future spread. Although its transmission is mainly sexual at present, it is also spread by blood, which makes it a hazard for intravenous drug users and health care workers; the hazard to blood and organ recipients has been largely eliminated by testing of these tissues. The prolonged existence of preclinical infections in many patients, many of them testing negative on available serological tests, creates special problems for their contacts.

Other STDs do not cause death, but do cause a great deal of morbidity. Gonorrhoea accounted for 94% of the reported cases of reported STDs in 1985[55], with penicillin-resistant strains an increasing problem. The highest rates are found among people aged 20-24. Although there has been an overall decline in the traditional STDs, important new problems are emerging. Chlamydia has recently been recognized as a major disease, and like gonorrhoea causes pelvic inflammatory disease, which can require hospitalization and can cause ectopic pregnancy and infertility. Hepatitis B is a serious disease, which can cause cirrhosis and liver cancer. It is often but not exclusively sexually spread, and is preventable by vaccination, especially of high-risk groups. Herpes genitalis virus has cancer-causing potential. Multiple sexual partners and failure to use condoms account to a large degree for the high rate of STDs.

Although their incidence is fairly low in Ontario, cases of measles and other vaccine-preventable diseases of childhood continue to occur, unnecessarily and unacceptably. Influenza remains a threat to older

people. Communicable diseases affect segments of the population differentially, e.g., recent immigrants, native populations. In 1986, reported rates of measles, mumps and rubella were two to three times as high in the northern regions of Ontario as in the rest of the province[56]. Enteric diseases like salmonellosis remain fairly common, especially in remote areas.

Action Implications. AIDS demonstrates the full gamut of actions needed to control communicable diseases. In the absence of a vaccine, control of this disease depends largely upon adopting safer sexual practices, which is addressed under Goal 5. Education should be directed to teenagers and to the public in general, and to homosexuals and intravenous drug users and their partners in particular. This should deal with safer sexual practices, particularly the use of condoms, and with (in the case of drug users) use of clean needles. Research should address methods of spread, interventions for detection and treatment, and especially the development of a vaccine.

Education regarding safer sexual practices is also the main approach to control of other STDs. For other communicable diseases, immunization is the most powerful and cost-effective preventive intervention we possess, and we should ensure that high immunization rates prevail throughout the province. Indeed, the elimination of indigenous cases of such vaccine-preventable diseases as measles and rubella by some early date (e.g., 2000 AD) is an attractive and feasible objective. Greater efforts are needed to ensure that older people receive influenza and pneumococcal vaccine. It is anomalous that the province funds only those vaccines intended for universal use,

excluding such vaccines as those for Hepatitis B and pre-exposure rabies. Improved personal hygiene and provision of clean water supplies remain the best available approaches to preventing enteric disease.

3.7 Reduce morbidity and disability from musculoskeletal diseases.

Problem Statement. Although they do not cause significant mortality, arthritis and related diseases are the leading causes of long-term disability (38% of all cases in 1983-84[44]). Since these diseases are more common in older people, this goal will become more important as the population ages. Osteoporosis is common in older women, causing fractures especially of the hip (often leading to death) and spine (leading to pain, disability and disfigurement).

Action Implications. We lack the knowledge to prevent these conditions at present (except possibly for osteoporosis), so research into causes and prevention is a high priority. But we can do a great deal to reduce disability from established disease, through better community and environmental supports. These issues are addressed under Goals 3.9, 4 and 6.

3.8 Reduce the incidence of dental disease

Problem Statement. Despite a continual decline over the past two decades, dental caries remains a common chronic health problem in school children. No decline is evident in Indian children, who continue to have very high rates of dental caries (70% in four to eight year olds)[57]. Periodontal disease affects over 50% of adults[58]. There is a large gap between need and use of

dental services, and this gap is strongly related to income, so the issue is important from the standpoint of equity. The elderly have significant dental needs, especially those in long-term care institutions[59], but are low users of services.

Action Implications. Dental disease is an outstanding example of the case for prevention, since the majority of it is preventable, while treatment is expensive. Fluoridation of community water supplies and provision of preventive and treatment programmes for high-risk children and the elderly are the most important approaches needed (Goals 4, 6 and 7). Diet and dental hygiene are also key determinants (Goal 5). Technological advances such as new sealants may also contribute significantly to dealing with the problem.

3.9 Reduce the impact of disease and disability.

Problem Statement. This sub-goal does not refer to specific diseases, but rather to disability from all conditions, including those which have already been addressed in other sub-goals. The overall prevalence of disability, defined as trouble in carrying out at least one of the activities of daily living, or limitation in activities at home, work or school, is 14.6% in females and 12.5% in males[29]. It rises sharply with age, from 4% at age 15-24 to 39% at age 65+. Slightly over half (54%) of disabled Canadians are considered mildly disabled (able to perform all the activities of daily living, but with difficulty), 23% are moderately disabled (unable to perform one or two activities), and 14% are severely disabled (unable to perform three or more)[29]. The most common types of disability are in mobility and agility, followed by

sight, hearing and speech; sight and hearing problems become especially common in old age. Equity is a double issue here, since disability strongly affects income (as noted under goal 1.1) and since low income groups are less able to deal with chronic disease than are more affluent people. This goal will become more important as population ages.

Action Implications. More research is needed on ways of limiting disability, e.g., after spinal cord injuries. But development of disability is often unavoidable, and in these cases we must limit its impact. An adequate response to this problem requires that disabled people have well-developed coping skills, access to support services, and an appropriately designed environment.

Determinants of Health

GOAL 4 PROVIDE ENVIRONMENTS WHICH SUPPORT HEALTH

Buck has described the environment as the most important of the health fields[60]. We must provide environments which support all aspects of health and which do not contribute to illness. The term "environment" is used here to include all levels of the social and the physical environment which can affect an individual's health. The social environment consists of people and their interactions, which may vary greatly in their degree of supportiveness for individuals. The social environment provides social resources, which consist of "the interpersonal networks of which people are a part and which are a potential source of crucial supports: family, friends, fellow workers, neighbors, and voluntary associations"[61]. The social support aspects of the social environment include

emotional support, appraisal support which provides affirmation and feedback, the provision of information and advice, and instrumental support involving aid in kind, money, labour, time and modifications to the environment[62]. The physical environment includes the natural environment and the "built environment".

4.1 Foster strong and supportive family relationships

Problem Statement. "Family" is used here to include non-conventional families and households, as well as the traditional woman-man-child unit. One-parent families, led by women in the majority of cases, are increasingly common. The family is usually the most immediate potential support to individuals, and thus their "first line of defence". Age-adjusted mortality rates from all causes have been found to be lower for married than unmarried men[63]. Contact with friends and relatives is also associated with decreased mortality rates, especially among older persons. Married women have been found to have better health status on a number of measures: fewer disability days, less chronic limitation, and better self-rated health: "The healthiest women have multiple roles -- a job, husband,and often children. The least healthy women have no job, spouse or child"[64].

The family can play important roles in prevention, through role modeling, adopting nutritional and lifestyle patterns which promote health, and fostering attitudes toward health and the use of health care services. The Canadian Health Promotion Survey found that a person whose spouse smokes cigarettes is 2.5 times more likely to smoke than a person whose spouse does not; the ratio for tranquilizers is five to one[65].

The family also acts as an important care-giver for sick or disabled family members. It has been estimated that 70-80% of care provided to the community-dwelling elderly is provided by informal care-givers, most of whom are female family members[66].

The family can also be a locus for physical and mental abuse, as referred to under Goal 5.7. The goal of fostering strong and supportive family relationships must therefore encompass the entire spectrum of family types, and must not only support "healthy families" but restore quality to family life where it is lacking.

Action Implications. The family, defined broadly, should be supported by public policies, through such programmes as counseling services and subsidized housing, where these are needed. Measures should also be taken to assist the family's capacity to act as a care-giver, to increase the likelihood that ill family members can remain at home and avoid institutionalization. Cooperative roles within the family should be promoted to avoid role stereotyping, which may place undue burdens on particular family members, usually women. Equity concerns call attention to the economic injustice experienced by many single parents, who do not always receive the family support due them.

4.2 Foster strong and supportive communities

Problem Statement. The community is the next most immediate environment for the individual, and can contribute to his or her quality of life and coping skills. Community may be defined as an "identifiable self-conscious group with shared common interests. Communities may or may not have a territorial base, and

they vary in their level of self-sufficiency"[67]. Thus, the concept can include culturally or occupationally defined groups. This discussion will focus on the former.

The impact of multiculturalism on health status and health care is great and dynamic in Ontario. Ethnicity is not a property of only some segments of the Ontario population, but rather speaks to the diverse heritages of every one of us. Ontario has a significant Francophone population (5% of the total population of the province), which is concentrated in the northern and eastern parts of the province. The province currently receives about 50,000 immigrants and refugees a year, half of these going to Toronto. Social and health policies should neither weaken nor ignore the viability of ethnocultural communities, with their variety of cultural beliefs and values. These beliefs and values affect perceptions of health and conceptions of the legitimacy and efficacy of health care.

Language is a barrier to accessibility. The Francophone population does not enjoy full access to services in the French language. Half of recent immigrants arriving in 1980 speak neither English nor French[68]. A recent survey of 135 "mainstream" health and social service organizations in Metropolitan Toronto found that 87% of service provider respondents acknowledged the public does not know what services are available, while 81% said that information was available in English only. Less than half the agencies trained their staff to be sensitive to cultural issues and only 4% had taken steps to increase ethnocultural representation on their boards[69].

Action Implications. Communities can be strengthened through fostering self-help groups, voluntary agencies, formal and informal support networks, and providing enhanced recreational and educational opportunities. It has been argued that "fostering public participation" can have enduring impacts in promoting health[19]. This will require a shift in the allocation of resources to local community groups, as discussed in goal 6.3 and Chapter V. Current policies which are designed to increase the availability of services in French to the residents of communities with significant Francophone populations should be supported and extended, with particular attention to increasing consumer participation in service provision.

4.3 Ensure working environments which are safe and which support health.

Problem Statement. Workers spend a large proportion of their waking lives under conditions over which they often have little control and which often pose hazards to their health. Physically arduous work, work with little intellectual challenge, work that is repetitive and boring, work environments with noise and air pollution, and unsafe working conditions due to fast-moving machinery or the presence of toxic substances all threaten the well-being of workers[70].

Workers' Compensation data are inadequate to estimate workplace hazards, because they only include worker-reported and compensated injuries. Nonetheless, there were 385,000 compensable cases in Ontario in 1981, for a cost of $620 million[71]. Extrapolation from

United States data suggests that 150,000 Ontario workers become ill or die prematurely every year, as a result of their work[72]. More days are lost through injuries and illness than through industrial disputes [73]. Those industries which have the highest rates of accidental injuries include construction, mining and lumbering[24].

Action Implications. Legislation and regulations play a special role in the provision of safe working environments. Workplace health and safety are primarily the responsibility of the Ministry of Labour, but also involve other Ministries, especially Health and Environment. Thus, this is an area in which intersectoral coordination is especially important. There should be increased authority to the Ministry of Labour, local health agencies, unions and workers' groups to work with employers to improve the working environment. Right-to-know legislation is needed so that workers may be informed of hazards to which they are exposed. Better data on occupational diseases and injuries are needed, particularly occupational mortality statistics and a system of notifiable occupational diseases.

The workplace is also a community, and can serve as a centre for the delivery of health education and health promotion programmes[62]. Certain industries, or certain work units within industries (e.g., the garment industry) have work forces which are predominately composed of members of one ethnocultural group, making them particularly suited for health promotion programmes.

For many people, the home is the major work place.

It must be recognized as such, and its hazards controlled. However, because the main victims of health hazards in the home are children and old people, this environment is discussed under goal 4.5, on habitats.

4.4 Ensure a safe, high quality physical environment

Problem Statement. A safe, high quality physical environment is one of the cornerstones of health. A high quality physical environment is one in which air, food, recreational and drinking water are clean and free from toxic substances.

The Law Reform Commission of Canada has published a Working Paper on "crimes against the environment", in which it recommends the modification of the Criminal Code of Canada to include this new class of criminal offence[74]. The Commissioners cite evidence indicating the emergence of the right to a safe environment as a fundamental value among Canadians. The value includes such notions as the quality of life, stewardship of the natural environment, and the protection of human life and health.

The range of environmental problems is large, encompassing threats from lead, polychlorinated biphenyls (PCBs), pesticides, acid rain, contaminated drinking water, and the contamination of the food chain. One million tons of toxic waste are generated in Canada each year. Radioactive waste from nuclear power plants is a particular concern, given its longevity and the lack of a fully safe method for its disposal[75 76]. Ten of Canada's active nuclear facilities are located in Ontario. By the early part of the next century, Ontario Hydro[77] anticipates that there

will be a shipment of used nuclear fuel 2 or 3 times a week from each nuclear site in Ontario. At present, no acceptable solution for the permanent disposal of nuclear fuel waste has been found, and radioactive used fuel bundles have been accumulating at Canadian reactor sites for thirty years. The "decommissioning" of nuclear power stations after about forty years poses additional waste disposal problems.

In addition to the actual physical effects of environmental pollution, the perceived fear of these effects is of great concern, especially among young people who increasingly have to make informed decisions about them. Moreover, it is our present responsibility to guarantee the viability of the physical environment for generations in future millennia. Environmental protection must therefore be provided within a long-range perspective.

Action Implications. The area of environmental protection is one in which legislative strategies have an important place. In comparison to many of the issues addressed by health goals in this report, the imperative to ensure a safe, healthful environment requires attention at the local, provincial and national levels; indeed, many of the issues of environmental protection are truly global in scope. Safe methods for handling, transportation and disposal of toxic industrial and domestic wastes must be developed, through an integrated approach to the management of waste disposal, and legislative initiatives should ensure that these are used. Some jurisdictions have recommended or even legislated a moratorium on the licencing of additional nuclear power plants until a

permanent solution to the disposal problem has been found[78].

4.5 Provide habitats which support health.

Problem Statement. Parallel to the natural environment is concern for the quality of the human habitation environment. Habitat refers to "the provision and design of all kinds of shelter and structure including transportation, communication and infrastructure requirements for human activities"[79]. Thus, it refers to the built environment, including shelter (whether it be personally owned, rented or institutional), accessibility to green spaces and recreational opportunities, and provision of safe transportation networks. Improved living environments enhance the collective well-being of the community and the desire of individuals to be active participants within it.

The home is a special case, given its psychological importance and the amount of time which people spend within it. Children and old people are especially at risk for injury in the home. Cleaning fluids and other combustible products, as well as poisons in household use need to be controlled. Other issues in the home are air quality (including radon gas) and architectural design of the home environment to assist or protect the vulnerable from falls or barriers to use of their own homes.

Action Implications. Although some aspects of the built environment are well understood, others remain largely unexplored. For example, how can the generally noxious effects of commuting on health and well-being

be weighed against the potentially beneficial effects of living in a home environment of choice, while working in a geographically distant work environment of choice? While the Panel accepts that strong and supportive communities are conducive to health, it recognizes that little agreement exists concerning how to define, or design, such communities[80]. More research on the relationship between habitation and health is recommended, but in the meantime certain obvious issues can be addressed. These include greater attention to reducing hazards and enhancing safety levels in the home, and providing fire detectors. Support of public transportation should be increased.

GOAL 5 ENCOURAGE BEHAVIOURS WHICH SUPPORT HEALTH.

Behaviours are important determinants of health, so public policy should encourage Ontarians to adopt healthy behaviours. At the same time, society must avoid blaming individuals, who can only choose from among the options which are available to them. Accessibility to these options is defined by income, culture, environment, and ultimately by public policy. Healthy lifestyle changes may be too much to expect of individuals and groups who have little control over their quality of life. It is crucial to improve individuals' ability to choose, yet to provide enough flexibility around these choices to allow for individual, community and cultural variations.

5.1 Eliminate the use of tobacco.

Problem Statement. Smoking is the number one preventable health hazard in our society today. In 1983, approximately 18% of all deaths among Ontario adults aged 25 and over were attributable to smoking[81], as

were approximately 8.5% of all Potential Years of Life Lost. Conditions attributable to smoking account for 7.5% of all hospital separations and 12.8% of all hospital days in Ontario. These statistics do not include the effects of smoking-related fires, passive smoking, or perinatal conditions. Cigarette smokers are at eight to fifteen times the risk of dying from lung cancer, and are also at greater risk for a variety of other cancers, as well as coronary heart disease, chronic obstructive lung disease, peptic ulcer disease, accidental fires and abnormal birth outcomes[82].

The importance of second-hand cigarette smoke has been recognized more recently[83]. Although the effect is relatively weak, the high prevalence of exposure makes it a significant health hazard, especially since children are exposed. Children of smokers experience higher rates of chronic and acute respiratory disease. Non-smoking spouses of smokers are known to experience increased rates of cancer and heart disease.

The recent Health Promotion Survey revealed that 28% of all Ontario adults over the age of fifteen are regular smokers[84]. The rate is higher for males at all ages except for the age group 15-19[65]. There has been a decline in cigarette consumption, far greater among males than among females[85]. Indeed, there has been a disturbing increase among women in their twenties who have taken up smoking on a daily basis[86]. More women are stopping while they are pregnant, although the number who quit early in pregnancy continues to be far too small[87]. Furthermore, a large proportion return to smoking after the child is born[13].

Use of smokeless tobacco (chewing tobacco and

snuff) is increasing among youth, especially among native youth[88]. A very recent survey of New Brunswick youth in grades 7 to 12 showed that 26% of rural youths and 14% of city youths used chewing tobacco at least occasionally; the youths believed it to be harmless, since there were no warnings on the packages, and associated its use with healthy and successful athletes[89]. In fact, the health effects can be particularly devastating because of the extremely young age of the users, who may be as young as five years. Smokeless tobacco is known to cause cancer of the oral cavity, cheek and gum, and gingival recession (with eventual loss of teeth); because chewing tobacco is usually sweetened, it may contribute to dental caries[90]. The use of smokeless tobacco is unregulated[91].

Action Implications. All known uses of tobacco are harmful to health, the resulting burden of ill health is enormous, and the habit affects non-smokers through second-hand smoke. In view of these factors, the Panel has concluded that the only appropriate goal is elimination of tobacco use, despite the priority the Panel places on personal freedom of choice.

The National Program to Reduce Tobacco Use in Canada has suggested that we must protect the health and rights of non-smokers, help non-smokers to stay smoke-free, and encourage and help those who want to quit to do so[92]. The Royal College of Physicians and Surgeons of Canada has made a similar statement[93]. Reduction and eventual elimination of tobacco use will require a combination of prevention and cessation programmes, with appropriate legislation and regulations. Details are provided in the example presented in Appendix I.

5.2 Eliminate the inappropriate use of alcohol and other drugs.

Problem Statement. It has been estimated that there were approximately 215,000 alcoholics in Ontario in 1981[81]. This makes addiction to alcohol the leading drug addiction. Most alcohol-related deaths occur among men, and cirrhosis of the liver is the sixth leading cause of Potential Years of Life Lost in males. In addition, alcohol consumption is associated with peptic ulcer disease, hypertension, cancers of the oesophagus, mouth and pharynx, congenital defects (including foetal alcohol syndrome), depression, psychosis and dementia. Alcohol is associated with approximately half of all fatal motor vehicle crashes, and is a major factor in falls, fires, drowning, homicide and suicide. It is estimated that alcohol is a factor in one third of child abuse cases, one sixth of divorce cases and 30 to 51% of violent crimes[94].

Drug-related deaths are largely due to accidental overdose and suicide, and to a lesser degree to fires. Most morbidity due to drug abuse is associated with intoxications and drug-related mental disorders.

Several categories of drugs are abused. Among prescription drugs, the use of tranquilizers and sedatives has increased slightly since 1982, and is greatest among women in lower income groups. Stimulants are used equally by men and women[85]. Among illicit drugs, marijuana use has doubled in the last ten years and cocaine use is steadily increasing. Illicit use of narcotics is also increasing, with Ontario being second highest among the provinces.

The number of drug-related offences among adults has virtually tripled from 1971 to 1982; these offences often involve repeat offenders[85]. Those convicted were predominantly male (97%) and about 90% of them were under the age of 30, 40% being under 21.

Action Implications. Eliminating inappropriate use of alcohol and other drugs will reduce Ontario's lost human potential from premature deaths, illness, and damage to unborn children, and through individual, family and community disruption. The necessary preventive strategies are similar to those for smoking, viz., various forms of education and regulation. Price and consumption of alcohol are inversely related, indicating that prices should be kept high. Communities should be encouraged to identify potential at-risk groups, and to develop programmes for them. Such programmes could enable youth and others to choose alternative behaviours to cope with stress, to resist peer pressure, and to aim for a drug-free lifestyle. Support for community organizations such as MADD, SADD (Mothers and Students Against Drunk Driving) and community-based services for recovering addicts should be enhanced, in terms of both funding and community profile. There has been a recent shift in the emphasis of treatment services from rehabilitation to prevention and early identification of problems, but treatment of established substance abusers continues to play an important role.

5.3 Improve the nutritional quality of diets.

Problem Statement. Nutrition plays an important role in the promotion of health and prevention of disease.

The effects of inadequate nutrition include compromised growth and development during pregnancy and infancy, learning problems in children, increased susceptibility to disease and reduced capacity to work[95 96 97]. The Canada Health Attitudes and Behaviours Survey found that nearly half of the children tested did not eat a balanced diet, as recommended by the Canada Food Guide[98].

Malnutrition can also occur as a result of an excessive or unbalanced intake of nutrients. The effects of over-nutrition include obesity, poor dental health, heart disease and hypertension. The Canada Fitness Survey found that 21% of women and 14% of men age 20-69 were at least 20% above the reference weight standard[99]. The Canada Health Survey showed that 13% of males and 24% of females had high risk levels of serum cholesterol, little changed since the Nutrition Canada Survey of 1972[100]. Reducing the fat content of the diet may reduce the risk of heart disease, while reducing energy intake may help prevent obesity. In general, the evidence suggests that Ontarians would be better off to reduce their intake of energy, fat, simple sugars and salt, and to increase dietary fibre[101 102 103].

Action Implications. An adequate diet for Ontarians will depend on the ready availability and accessibility of quality foods, and on people's ability to choose a well balanced and moderate diet, as defined by Canada's Food Guide. Appropriate strategies include improving accessibility of nutritious foods to low-income groups, the elderly, and other disadvantaged groups, recognizing the need to choose personally or culturally acceptable foods, and acknowledging the right of

consumers to have accurate and understandable information about foods and nutrition[104 105].

5.4 Increase levels of physical activity.

Problem Statement. Appropriate levels of physical activity promote fitness, reduce some of the risk factors for ischaemic heart disease, and enhance the individual's sense of well being and coping skills. Unfortunately, the Canada Fitness Survey found that only 25% of the adult population were sufficiently active to benefit cardiovascular health, and that 58% were sedentary. It appears that a life-long pattern of activity decline begins as early as age 10[106]. Youth in Ontario rank behind British Columbia and the prairie provinces in activity levels[107]. This may be explained in part by the fact that the rate of participation by young people in physical education classes in Ontario drops more than does the Canadian average between grades 4 and 10[98]; physical education is an optional course in secondary schools in Ontario. Girls' activity levels drop off gradually at ages 12 to 13, to below the level for boys. At age 18 to 19, however, male levels cut back so sharply that they become less active than females at that age. Females make the transition from school to community programmes more readily than males[106]. This may be related to less emphasis on competitive sports in physical education programming for females.

Levels of physical activity correlate directly with education, occupation and income[107]. There is some evidence that education and type of employment are the key factors influencing activity levels.

Action Implications. If activity levels are to be improved, it is essential that positive attitudes towards physical activity be developed before the decline in activity begins. Parents, teachers, and community leaders should seek to create positive attitudes by age 10. This is likely to be most effectively accomplished if activities in the early years are truly enjoyable. There should be daily play and fitness programmes in day care centres and elementary schools. Traditional forms of activity, with their over-emphasis on competitive, rather than recreational aspects, and their resultant tendency to exclude the youngster of ordinary ability, lead to the creation of a small cadre of superior athletes and a large body of spectators. Physical education programmes might be more appealing to the student and have a greater positive impact on health behaviour in later life if they were more appropriate to the skill level of the child, and included less emphasis on competitive sports[108].

Lack of time and perceived lack of adequate facilities are cited as major obstacles to involvement in regular activity[106]. Other factors such as language, lack of child care, and hours of operation also affect access. Women, the elderly, the poor, and some ethnocultural groups are seriously affected by problems of access. Municipal recreation departments which charge user fees should reassess this policy.

5.5 Promote healthy sexuality.

Problem Statement. Sexual practices can lead to sexually transmitted diseases (STDs), unplanned pregnancy, and social disruption. STDs have been

discussed under goal 3.6, and sexual harassment and assault will be discussed under goal 5.7.

Unplanned pregnancies continue to affect an unacceptable number of teenagers in Ontario, although the pregnancy rate among females age 15 - 19 has declined in the past decade (from 36 per 1000 in 1975 to 22 per 1000 in 1983). This decline reflects the availability of government-funded family planning programmes in Ontario Health Units[36]. The rate of therapeutic abortions has risen for the age group 20-29 during this same time period. Québec data indicate that 50% of teenagers aged 15-18 are sexually active, and that an average of one year elapses between the onset of sexual activity and the search for contraception[15].

Action Implications. A social environment must be created in Ontario which fosters a healthy approach to sexuality, encouraging sexual behaviour only with mutual consent while clearly discouraging coercive or violent sexual behaviour, and behaviour likely to lead to disease or unwanted pregnancy. Educational efforts have the capacity to promote safe sexual practices, notably through use of condoms[109]. Grade 10 students in Ontario reported in a recent survey that their major source of information about sex came from school classes; Ontario youth were lower than the national average with regard to the role parents played in providing information about sex[84]. Thus, organized education of young children and adolescents appears to be a practical strategy[110].

5.6 Promote safe driving behaviour.

Problem Statement. Despite a decline over the past 15 years, 1919 persons were killed in motor vehicle crashes in Ontario in 1985, and an additional 109,169 persons were reported injured[111]. While the severity of crashes has been reduced, their total number appears not to have declined. The age groups with the most deaths are 20-24 and 16-19 year olds, so the impact on Potential Years of Life Lost is disproportionately large. Older drivers are also over-represented in accidents, but only those in their late seventies or later. Males of all ages make up 56 per cent of the driver population, but account for 72.9 per cent of all drivers involved in accidents and 81.9 per cent of the drivers involved in fatal accidents. 1.2% of all hospital separations were attributable to persons injured in motor vehicle accidents in 1984. Also relevant are the costs of long-term disability, productive time lost and secondary costs to friends and families.

The largest single factor contributing to traffic accidents is alcohol abuse: about half the drivers killed have been drinking, although this proportion has fallen recently. The decline is apparently a result of public education programs, new legislation and more aggressive enforcement campaigns[111]. Speeding and failing to yield the right of way remain the most frequently noted errors committed by drivers involved in all accidents, particularly in serious accidents.

Action Implications. Combined educational and regulatory approaches are needed with respect to impaired driving of any vehicle (cars, boats, bicycles, etc.),

use of seatbelts and helmets (where applicable) adoption of defensive driving practices, and avoiding excessive speeding.

5.7 Eliminate violent and intimidating behaviour.

Problem Statement. Canada is fortunate in having much lower rates of violence than the United States, but any is too much. The physical, social and psychological effects of violence are often long-term and sometimes permanent. "Street" violence, family violence, and sexual assault and harassment are included within this goal.

At greatest risk of becoming victims of violent crime are those who are socially disadvantaged by low income, low education or geographic location. Rates of violent attack are much higher in native populations[112]. Overall, women are victims of reported physical violence less frequently than men. However, they express greater fear for their personal safety[113]. The elderly also frequently express fear for their personal safety[114], although the Canadian Victimization Survey data indicate that older individuals are relatively unlikely to be victims of personal crimes. Regardless of the actual rates of violence, this fear contributes to a sense of helplessness and loss of control over one's personal environment.

Progress has been made in recent years in recognizing violence in the family, which was often hidden to the community and law enforcement. The leading victims of family violence are women and children[115] [116]. Few data on wife abuse exist, but it is estimated that at least one in ten married women in Canada is

battered by her husband[117] [118]. Similarly, it is estimated that 2000 to 3000 children in the province are victims of child abuse[119]. Of equal concern is the devastating effects on those who live in daily fear of potential violence.

Women are seven times more likely than men to experience sexual attack, with young women being at greatest risk[113]. Frequently, assaults are not reported, in the belief by the victim that involvement with the legal system will only add to their trauma. Low levels of reporting may result in insufficient recognition of the risk women face, as well as inadequate response to victims' need for care and support. It is estimated that one in four young females and one in ten young males will be sexually molested by an adult at some point in their childhood[120]. Perpetrators appear most often to be parents or relatives of the victim[119].

Despite growing acknowledgement of its importance, sexual harassment continues to be a major problem, particularly in the workplace and in university and college settings. Whether the harassment is physical or verbal, the impact can be far reaching and long term. Even so, the problem tends to be invisible, because of scarcity of data and the reluctance of women to report it[121].

Action Implications. If they are to have the opportunity to lead lives which are truly healthy and productive, Ontarians must be free of intentional violence and intimidation, whether physical or mental. Violence must be made completely socially unacceptable, which requires that it be neither encouraged nor condoned, most obviously in our media and our sport. Models of

non-violent responses to adverse situations are required, as is assurance of support for individuals, families, and communities in distress. Through such mechanisms we can hope to stop the perpetuation of violent behaviour from generation to generation. Special attention will be required to address regional disparities in the incidence of violence.

GOAL 6 PROVIDE HEALTH SERVICES WHICH SUPPORT HEALTH.

Illness and disability will continue to exist, and this goal particularly addresses the needs of the sick. Health services play the key role in treatment and in rehabilitation, when disease has developed, and an important role in disease prevention. Ontarians are justly proud of their health services, which are by any standards among the best in the world. They can also, with other Canadians, be proud of their health insurance programme, which covers over 80% of the cost of their medical and hospital care. The health care system has recently been reviewed by the Ontario Health Review Panel in more depth than is possible here[18].

Although the system is an excellent one, there is a need for some shift in emphasis. It relies too much upon institutional care, especially for the aged and the chronically ill. As a result, costs are probably higher than they need to be, although they have been contained far more successfully than in the United States. If current trends toward providing ever more intensive care to the elderly continue, the aging of the population will place greater strains upon the health services system[122].

Services which promote health and prevent disease must be strengthened. When health is defined as a person's ability to function as efficiently as possible and to

accomplish what he or she wants in life, the necessity for strong links between health promotion, disease prevention and curative services is emphasized. Disease prevention and health promotion should not be seen as competing with curative medicine, but as complementary.

Health services must address economic, social, cultural and environmental factors in health and disease. Improved strategic health planning, a shift in emphasis from acute care to disease prevention and health promotion, and increased availability of community-based services would foster this approach.

6.1 Provide accessible, effective health services for all.

Problem Statement. All residents of Ontario have the right to high quality, accessible, appropriate and comprehensive health services, independent of age, gender, level of functional ability, language, ethnocultural origin or geographic location. Accessibility should be understood to include psychological, social, emotional and economic aspects. Several groups are currently disadvantaged. Residents of northern Ontario must often travel to the south for specialized services. While this is unavoidable in the case of many highly technical services (such as some forms of diagnostic imaging), it is less acceptable when it affects the services of medical specialists. Health and social services have not adapted well to the needs of ethnocultural groups. Large numbers of Ontario residents have no facility in English or French, and no familiarity with the complexities of our health care system. The poor have limited access to some health services. Although the direct costs of health services are covered by the health insurance plan (with such

notable exceptions as dentistry), such indirect costs as travel, child care and lost income while seeking care can present real barriers.

Provision of chronic care is an increasing problem, especially with the aging of the population. Acute inpatient facilities are often filled by chronic patients, with adverse results for both the patient and the institution. The rate of institutionalization of the aged is much higher than in many jurisdictions.

Ontario's health services are acknowledged to be of high quality. There is much attention paid to ensuring this high quality through structural approaches (such as licensing, certification and accreditation), and some to process (as in the requirement that accredited hospitals have in place an acceptable medical audit programme). However, there is almost no systematic monitoring of outcomes, even in hospitals, and little attention to any sort of quality measures in ambulatory care.

Action Implications. Effective planning is needed to ensure that the supply, distribution and organization of human and physical resources is optimal for achievement of health goals. This approach would provide all the effective services that society can afford, while recognizing the need to ration care on the basis of need (defined by ability to intervene effectively).

Financial and non-financial barriers to health care must be eliminated in Ontario. Improved access for geographically disadvantaged areas requires an increase in the range of services and human resources available locally. The increased supply of physicians

provides the opportunity for a strategy to ensure their appropriate distribution across the province. When separation is inevitable, the individual should not be penalized in terms of cost of transportation, and coordinated planning is needed to ensure substitute supports while away and smooth entry back into the community. It is essential that health and related services be available in French, in areas where the number of Francophones warrants it. The education of health practitioners for the Francophone community should be enhanced. Practitioners in the health and social services should be encouraged to expand their understanding of the needs of ethnocultural groups. Health service delivery models sensitive to individuals, communities, and cultures are necessary. To achieve this, members of ethnocultural groups should have adequate opportunities to participate in the governance of such services.

We must develop an integrated chronic care system, encompassing an appropriate mix of residential and inpatient facilities, and community-based support services. Such a system would enable rates of institutionalization to be reduced, and would place many of those who must be in institutions in less intensive and more appropriate levels of care. The New Agenda for Senior Citizens is an outstanding start towards the intersectoral coordination which will be required[123].

Health professionals should be encouraged to develop and implement standards of care, with particular attention to health outcomes and to the ambulatory sector.

6.2 Shift the emphasis towards health promotion and disease prevention.

Problem Statement. At present we devote less than 5% of all health expenditures to health promotion and disease prevention[124]. Health systems which devote a greater proportion of their budget to prevention and to public health, e.g., those of Japan and northwest Europe, appear to be more efficient. We may be at the point where additional dollars spent on curative care will not yield proportional increases in health, i.e., the point that health policy analysts have come to call "flat-of-the-curve" medicine[125]. By contrast, there is growing evidence that there are numerous programmes in the health promotion and disease prevention areas that are likely to prove cost-effective[126]. Economic considerations are important reasons, though not the only ones, for shifting the emphasis away from the traditional curative health care services orientation of our system to one that has a better balance between cure and prevention and promotion.

Action Implications. We must recognize the "primacy of prevention", and sharply increase our efforts in these areas. Nearly all of the submissions received by the Panel called for such a shift in orientation. Public health departments have a key role, and many have recently increased their health promotion activities. But personal health services also have an important role, e.g., in counselling regarding health behaviours, screening for cancer and other conditions, and managing hypertension. Health practitioners should receive appropriate financial remuneration for providing preventive services, where these have been shown to be cost-effective. The shift in emphasis would be

enhanced by several initiatives other than the obvious financial one. Educational institutions produce a small number of specialists in health promotion, but more may be needed. Expanded prevention-oriented courses are needed within the curricula of medical, nursing, dental, physical and occupational therapy, and social work schools. Current health promotion strategies are frequently not familiar to public health nurses, family physicians, community developers and others in the community who are committed to the concept of prevention. Educational institutions should provide appropriate continuing education.

6.3 Increase community participation in health services.

Problem Statement. The great majority of health services are provided either by independent practitioners or by large institutions. Both these models may be somewhat remote from the populations they serve, especially in disadvantaged districts, in terms of the range of services offered, hours of operation, communication style, etc. Both are also criticized for being technologically oriented. Alternative models exist in Ontario, in the form of Community Health Centres, but these are very few in number and serve less than 5% of the population. Greater community input has the potential to allow services to respond more directly to the needs and priorities of the local population. It can also assist in the reorientation from cure to care, and contribute to increased emphasis on prevention, especially if health and social services are combined.

Action Implications. We must establish mutually supportive partnerships between health professionals and consumers. Although there is scope for increasing

community input into all types of health services (e.g., through community advisory boards), the most promising approach is development of more community-based services. By community-based services the Panel refers to non-institutional services accountable to the local population, ideally through a community board elected specifically to oversee the services. Thus, they include Community Health Centres and a variety of health agencies (e.g., storefront clinics) and health-related social agencies (e.g., community information centres). Community Health Centres should be available to a much larger proportion of the Ontario population. This will require much stronger support from government in terms of capital and start-up funds, and provision of realistic rewards for reductions in hospital care. Other community-based services deserve similar support.

Public Policy Supportive of Health

GOAL 7 ESTABLISH PUBLIC POLICY WHICH SUPPORTS HEALTH

The Panel sees public policy as the key to improving health. Public policy must encourage the governmental, community and individual changes outlined in the preceding health goals. Accordingly, the Panel has framed a single broad goal which encompasses strategies from a great many areas. These strategy areas are outlined in the next Chapter. They include economic development, strategic management, resource allocation, collaboration and coordination, legislation and regulation, social marketing, community development, health education, health advocacy, appropriate technology, and research and information.

V. STRATEGIES FOR ACHIEVING HEALTH GOALS

At the Conference on Health Goals, the Minister of Health recognized that if we want a healthier province, we must plan for a healthier province. Recognizing that health goals are only a necessary first step, the Minister committed himself to an action response that would "transform these goals from paper to policy".

Improvement of health will be facilitated through formal policies and programmes and through individual and community actions. This chapter goes beyond the health goals to identify several strategies, intended to guide development of a policy framework*, which will in turn lead to initiatives to improve the health of the Ontario population. These strategies focus mainly on health promotion, since the health care sector is already very strong. The strategies are closely related, and often overlap one another. They have been arranged in logical clusters, but have not been priorized.

The strategies demand action at many levels of Ontario society, but are addressed particularly to:

1) the government of Ontario, which must develop policies that will facilitate optimal health outcomes for all Ontarians; and

2) communities, which must enable individuals and families to improve their health. Since different groups within Ontario will have differing specific objectives within the broad goal areas, the specific strategies for

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* A **policy** is a statement that sets out a specific course of action for implementing a strategy.

achieving those objectives will vary.

1. Economic Development for Health

Abundant evidence establishes the relationship between economic development and health[127]. Poverty subjects people to decreased self-esteem and fewer healthy choices, which combine with the adverse environmental factors to which the poor are subject to impair health. The Panel believes that a fundamental strategy for the achievement of the goals specified in the previous chapters is the consistent and vigorous pursuit of an adequate income for all, through a variety of public policy initiatives at all levels of government. Full employment is probably the most desirable approach, but the Panel recognizes that it may not be economically or socially feasible, and that there will always be some persons who are genuinely unemployable or at least temporarily unemployed for varying lengths of time. Furthermore, the increased use of job-sharing and part-time employment will reduce the income of many persons who are employed. It is therefore essential that there be policies to ensure a safety net in place to protect people from these economic risks. The most appropriate form may be a guaranteed annual income for all residents of Ontario, but the Ontario Social Assistance Review will address this issue in more depth.

Economic policies must also deal with communities. The dependence of many towns upon a single industry can adversely affect health, when that industry declines. It is therefore desirable to plan for diversification of the economic base of all communities, to protect them from sudden swings in the economy and to provide them with a stable tax base to support social programmes. Economic development must also include protection of the physical

environment, by recognizing that pollution control is a necessary cost of development.

2. A Management Process which Supports Health

The provision of health care services currently occupies most of the thinking, planning and finances of the Ministry of Health. Yet the list of health goals shows that traditional health services are only one part of the activities required to support health in Ontario. The Ontario Health Review Panel has indicated the need for a new strategy for health in Ontario, embodying many of the points made in this report. A management framework is required which directs resources throughout the Ministry towards achievement of the health goals. Strategic management is such a process, inasmuch as it integrates the formulation, implementation and evaluation of the strategic plan into the management process, and engages people throughout the organization in strategic thinking[128]. Management must develop the flexibility and creativity to find opportunities to improve health, and to ensure that these opportunities are exploited.

The planning component of strategic management implies a shift from the demand-based and resource-based models which have shaped health services to date, to a model based on the needs of the population, as exemplified in the goals proposed in Chapter IV. Such planning goes beyond specific health problems of individuals, to deal with the social, behavioural and environmental determinants of health and illness in the population. It continually scans the health of the population, in order to be able to recognize new health problems at an early stage. The emerging health effects of environmental pollution illustrate this need for comprehensive planning, e.g., contamination of drinking

water, exposures to PCBs[129].

3. Resource Allocation for Health

None of the goals has meaning unless resources are available to work for its achievement. This refers to both physical resources (buildings and equipment) and human resources (health personnel for both the preventive and curative sectors). Provision of such resources may take the form of allocation of new resources, or of re-allocation of existing resources. Allocation of new resources is easier, since no existing programmes or sectors need be cut, but new resources are scarce. Reallocation is therefore the more powerful approach, and is inevitable if realignment of efforts to promote health is to occur. Reductions in our current high rates of institutionalization (both acute and chronic) could free considerable amounts of resources to be applied to achieving the health goals. We must put into place a policy to reallocate resources in conscious efforts to support health. Even a small shift in resources (say, 1% of the total health budget) to the preventive sector could have a major impact.

It is recognized that resources are limited, and that not all desirable programmes or policies can be afforded, whether preventive or curative. Thus, it may not be possible to attack all the goals in the short term, and priorities will have to be set by the province and by local communities.

4. Coordination and Collaboration

As federal, provincial and municipal governments become more involved in health promotion and disease prevention, coordination of policies and programmes is needed to ensure

rational use of resources and consistent dissemination of information. Similarly, at the community level, collaboration among groups and agencies will enhance efforts to improve health. This coordination and collaboration must occur at four levels:

1. Inter-jurisdictional, between different levels of government. Public policy for health will not be fully effective if adopted by Ontario alone, and some problems require concerted action by all the provinces and the federal government. In this way, Ontario can contribute to improved health for all Canadians;

2. Inter-sectoral, among ministries of the provincial government. Because the health goals provide direction for all attempts to preserve and improve health, they need to be integrated into the planning and management process of the entire government of Ontario. The Ministry of Health should accept responsibility as lead ministry for developing public policies supportive of health in Ontario;

3. Government-community. A well-defined link between government and community planners is essential. Enrolment of communities in the goals process requires provision of guidelines and expertise for local planning, along with funding for development and implementation of regional plans. Good examples are the Ontario Ministry of Recreation and Tourism's Community Motivation Projects and the PATCH (Planned Action Toward Community Health) programme in the United States; and

4. Within-community, among agencies. Planning to meet the social, recreational, health services, and economic

needs of the community will involve a multitude of groups, agencies and services. Coordination of all these efforts requires the existence of a community planning body with the broadest possible concept of health.

5. Legislation and Regulation

Legislation and regulation are the strategies of choice for reducing social and physical environmental risks over which individuals have little or no direct control. They were accordingly discussed at length under goal 4, on healthy environments. These approaches do not always have to be restrictive, but can also be enabling, as in removing the requirement that communities conduct a plebiscite before introducing water fluoridation, or empowering, as in community or workers' right-to-know legislation. Their effect on health can be quite indirect, as in encouraging tobacco farmers to switch to other crops.

Legislation and regulation can also be important behaviour modification mechanisms, through making the healthy choices the easy choices, by means of incentives (subsidizing healthy behaviours) or disincentives (restricting or penalizing unhealthy behaviours)[5]. A good example of the former is the possibility of setting the price of unleaded gasoline lower than that of leaded gasoline. An effective example of the latter approach is the current Ontario seat belt legislation.

6. Social Marketing for Health

The potential of the goals for improving health would be enhanced by increasing the general understanding of health goals and objectives, and their use in planning. The

public must believe that their participation is worthwhile in building a healthy community. Furthermore, many of the health goals imply active participation by the public in accepting responsibility for health, changing behaviours, helping others, and working with providers. As the health goals process attempts to put health on the agenda of all Ontarians, social marketing (or more specifically "health marketing") becomes an important strategy. Social marketing is the design, implementation and control of programmes seeking to increase the acceptability of a social idea or cause to a target group[130]. It goes beyond classical marketing to consider the political will of various groups. Social marketing highlights three elements critical to changing ideas:

- the consumer perspective, as distinct from a provider one;

- interpersonal approaches, as distinct from impersonal ones like mass media; and

- joint ventures, e.g., between government, industry and consumers. An example of the latter is the Particip-Action Challenge, a joint venture between industry, governments and non-governmental organizations, intended to increase community participation in physical activities.

Social marketing of the goals requires identification of interested groups, and involvement of these groups in identifying strategies to improve health. A marketing plan for the goals process should be developed for both the provincial and local levels.

7. Community Development

Community development can contribute significantly to improvement of a community's health. This is a process whereby a community organizes itself to identify and solve its own problems, by adopting a self-help, consensus approach. The range of community development models is broad, but all prescribe tactics and activities that empower and enable the community to assess its own needs and abilities, analyze the options for change, and mobilize resources from inside and outside the community. The community itself becomes a key resource, by virtue of its excellent knowledge of itself. One of the most important aspects is that communities learn problem-solving skills that can be used in other situations.

Community development often starts with a specific concern or issue, identified by the community. The process involves an initiator (animator), who may be an opinion leader from the community itself or a facilitator from outside. The infrastructure of the community is clarified, key informants identified and incorporated into the process, and local citizens made active participants in problem solving.

An example of such community action occurred in Thunder Bay, where the District Health Council identified a high mortality from motor vehicle accidents among teenagers at certain street corners, and worked through City Council to change traffic flow, resulting in a reduction in deaths. The recent report of the Canadian Public Health Association on Strengthening Community Health Services provides many further examples of communities solving their problems in creative ways[131]. The North Karelia project[46] is an outstanding international example.

8. Health Education

Health education plays a primary role in preparing individuals, families and communities to make decisions about their health. Although it traditionally took the form of imparting knowledge about disease and health in order to modify behaviour, the concept has been expanded to include attitudes and motivations and to discuss environmental and health services factors. It can be addressed to individuals, to the public in general (e.g., through mass media), or to special groups (e.g., children through schools, workers at the workplace, or professionals). The effectiveness of health education can be enhanced by putting it into the appropriate cultural context, acknowledging specific needs and idiosyncracies, and capitalizing on the experience of the groups and individuals involved. A specific technique is popular education, which goes beyond imparting knowledge to focus on raising consciousness and on empowerment[132]. It draws on the cultural context to present ideas, using drama and other means of expression. Although developed in Latin America it is also used in our culture, specifically by native Canadians (in plays about alcohol) and by mothers (in passing on health knowledge to their children). It could be used effectively to deal with such problems as the use of multiple over-the-counter drugs by elders.

9. Health Advocacy

Many health problems are concentrated among disadvantaged groups, and special efforts are needed to bring their problems into prominence. Health advocacy is the process of identifying problems of individuals or groups normally lacking influence, and acting on their behalf in order to

find solutions. Through existing or specially formed organizations, various tactics are used to raise the profile of a particular concern and to encourage the implementation of specific policies and actions. Tactics can include use of the media, public education and political lobbying, e.g., by petitions. Health advocacy can be practised effectively by public and special interest groups, health professionals and educators through professional associations, workers through trade unions, and consumers through community groups and consumer organizations. Elected politicians often play an effective advocacy role. Good examples of health advocacy can be found in the work of the Consumers' Association of Canada on drug patent legislation and the Non-Smokers' Rights Association.

10. Appropriate Technology

Technology should be directed towards the achievement of health goals. The enormous contribution of biomedical technology to clinical medicine is well known, but technology also contributes to the high cost and to the "mechanistic" nature of health services, and raises ethical questions. Technologies in all parts of the health services sector, preventive as well as acute care, should be accountable for meeting criteria of effectiveness and efficiency[133]. They should therefore be evaluated for their contribution to achieving health goals, and their applicability in specific settings.

The scope for using technology to assist in the achievement of health goals is very broad. Technology can contribute to disease prevention, e.g., through the development of vaccines by recombinant DNA technology and of genetic markers of susceptibility to disease. Information technology can allow improved patient data bases and can

also support the planning process. Communications technology can facilitate communication between health professionals and agencies, and can allow the disabled to live at home. Engineering technology can contribute to the design of safer environments and the quality of life of the disabled.

11. Research and Information

There are currently large gaps in our knowledge relating to the health goals. Establishment of health-supporting policies and monitoring of progress requires much strengthening of the knowledge base, through research and information.

Research is needed in the following areas:

* Social science research, to explore the basis of health behaviours.

* Policy research, to explore the impact of health promotion policies, such as those recommended in this report.

* Epidemiologic research, to elucidate the role of behavioural, environmental and socioeconomic factors in health and disease. The emergence of AIDS illustrates the significant contribution which epidemiology can make both to understanding causation and to means of control: the major risk factors had been identified and means of control developed, before the infective agent was isolated.

* Health services research, to evaluate prevention, treatment and rehabilitative services.

* Environmental research, regarding the causes and extent of pollution, and the means of preserving the environment.

* Biomedical research, the only one of the above areas which is at all well funded at present, to explore the underlying mechanisms of disease.

Research can also advance the "state of art" in health goals, through development of improved evaluation methods, better indicators, and prescriptions for needed changes in the health goals process.

HFA2000 broadens the aim of health planning beyond reducing premature death and disability to achieving equity in health and improving quality of life, and the scope of health information must accordingly be expanded. Current data are needed on the health, socioeconomic and employment status of the population, to facilitate research and evaluation, as well as to help define needs. There are at least four information needs:

1. A broad range of health status indicators;

2. Knowledge of the relationship between the health status indicators and their determinants, including social factors;

3. Knowledge of the frequency of the determinants in the population and its sub-groups; and

4. Data analyses which serve the purposes of planning and evaluation[134].

The experience of assembling data to support the health goals has convinced the Panel of the need for much better data on the health of Ontarians. Routinely collected data bases should be redesigned to render them useful for planning and evaluation, and an adequate Ontario Health Survey should be conducted at regular intervals, at least every three years. Once the initial developmental work has been done, the cost of each such survey would be less than $1 million, which is roughly equivalent to the operating costs of just one bed in a teaching hospital over the three-year period. The Government of Ontario should encourage a national survey, since comparative data are useful for both health planning and monitoring purposes, and since the cost of such a survey may be lower than the total costs of separate surveys undertaken by each province.

VI. FOLLOW-UP MECHANISMS

The Panel regards the development of goals as only the first phase in developing and implementing public policies supportive of health in Ontario. The province needs a long-term strategy for health planning, and this chapter discusses how this might be accomplished, with particular reference to health goals. It is obvious from the experience in other jurisdictions, from the valuable insights received at the conference, and from our own deliberations that there is no unique, "right way" to move the process along. Thus, the recommendations presented here are to be interpreted flexibly, in the light of other plans and developments. They are directed primarily towards the Ministry of Health, as the key agency and the one which initiated this report.

The Panel believes that the process of developing and implementing the goals has symbolic and practical importance; in some respects it may be as critical as the goals themselves. It is crucial in a democratic society that interested people and organizations play an active role in the planning process and come to feel some ownership over it, since only in this way will they be inclined to work towards the achievement of health goals. Thus, marketing the goals process is very important to the success of this venture. Health must be placed high on the political agenda.

Tasks to be Performed

Immediate Tasks. The following task needs to be undertaken as soon as possible:

* Development of <u>health objectives</u>. The broad goals in this report must be translated into measurable form.

Some of these objectives will relate to the provincial and others to the local level. Once measurable objectives have been established, it is desirable to define targets: specific amounts of improvement which are to be achieved and time frames within which these are to be achieved. Different targets will often be appropriate for the province and for local communities.

On-Going Tasks. Several other tasks need to be begun at once, but will continue well into the future. These include:

* Marketing the planning and goals concept, to keep health high on the agendas of politicians, professionals, and the public.

* Ensuring that adequate resources are available for central and local functions.

* Coordination of the provincial, local, professional and voluntary agencies involved.

* Provision of guidelines and expertise to the same agencies.

* Collection of baseline and follow-up data.

* Monitoring of progress towards achievement of the goals, and adjustment of programmes or goals and objectives as appropriate.

* Preparation for subsequent cycles.

Proposed Model for Follow-up

The above tasks require coordinated efforts at both the provincial government and local community levels.

Provincial Role. This report has addressed health goals at the provincial level, and it is essential for the provincial government to continue to show leadership and initiative. In the absence of these basic foundations, the chances for success are jeopardized. The first three recommendations are intended to support the establishment of a public policy framework in Ontario.

Recommendation 1: **That the goals presented in this document be accepted by the government of Ontario as a basis for public policy regarding health.**

Recommendation 2: **That the Province collaborate with the federal government and with other provincial governments to develop a consistent, comprehensive approach to health policy for Canada.**

Many of the policies needed to improve health are inherently national in scope, while nearly all will benefit from a coordinated nation-wide approach. Since Ontario is at the fore-front of health goals development, it can play a leadership role nationally.

Recommendation 3: **That the Ontario Ministry of Health accept responsibility as lead ministry for developing public policy supportive of health in Ontario.**

The Ministry should promote, encourage and facilitate interministerial discussion of health issues.

The next four recommendations address the goals process within the Ministry of Health.

Recommendation 4: **That the Ministry of Health develop a planning thrust which supports achievement of the health goals.**

This requires that the goals process be built into the planning process currently being developed by the Ministry.

Recommendation 5: **That a Health Goals Office be established to coordinate the goals process, with sufficient resources to function effectively.**

This Office would provide the planning process with visibility and accountability. Its responsibilities should allow for freedom from day-to-day operational pressures of the Ministry. It would be responsible for preparing the objectives, ensuring that the data needed to establish and monitor the objectives are collected, and preparing these data to show how much progress has been made towards achieving the goals. It would also be responsible for interacting with other ministries, where their activities relate to health goals, and providing expertise to local communities in objective-setting. The Office should be at a high level within the Ministry of Health, reporting directly to an Assistant Deputy Minister. It must be able to relate to the policy and planning activities of the entire ministry, rather than be restricted to any specific sector.

At the Health Goals Conference, it was suggested

that the Health Goals Office (or equivalent structure) report directly to the Premier, the Cabinet or the Legislature, given the intersectoral character of healthy policy. The Panel acknowledges that the translation of health goals into healthy public policy requires the commitment and cooperation of not only the Ministry of Health but the entire Cabinet. However, it also acknowledges the key role of the Ministry of Health in health policy, and therefore believes that the Office should be located within the Ministry of Health.

The Health Goals Office will require appropriate funding and staffing to carry out its mandate. As the process develops, staffing and types of expertise required will vary (e.g., requiring epidemiology at one point, community consultation at another); arrangements should be flexible enough to accommodate these fluctuations.

Recommendation 6: **That an Advisory Committee on Health Goals be established, reporting to the Minister of Health and composed of representatives of the public and of health organizations and professions.**

This Committee will provide a broad base of advice to the Minister on the specification of the goals and objectives, on the need for revisions, and on progress in achieving the goals and objectives. The chairman of this committee should have recognized expertise in this area. The Assistant Deputy Minister should be the key liaison person between the Committee and the Ministry.

It is essential that the Advisory Committee have the health goals process as its primary function, and

not get bogged down in day-to-day problems relating to managing the health care system. It is also crucial that it have a long-term existence; there is no point in developing a planning process which will last only a few years. Finally, the Committee must report directly to the Minister of Health, as the key minister responsible for health policy.

Recommendation 7: **That expert task forces be formed to develop objectives based on each health goal.**

The first major task of the Health Goals Office will be development of appropriate provincial objectives and indicators, a task which will require considerable subject expertise. Accordingly, a series of Task Forces should be appointed, each with responsibility for one or more sub-goals. The Task Forces should be chaired by experts either internal or external to government, and include adequate professional and consumer representation. Alternatively, each sub-goal could be assigned to a specific agency (foundation, professional association, etc.), as is being done with the United States Objectives for 2000. It is vital that this phase be carried out as quickly as possible so that momentum and interest are not lost. Ideally, the provincial objectives will have been set by June 1988, and the Task Forces disbanded. Implementation of the strategies noted in Chapter V and introduction of new programmes need not await completion of the objectives.

The next two recommendations deal with the need for the Ministry of Health to provide the necessary support for the goals process.

Recommendation 8: **That the Provincial government commit resources to support local communities in developing health objectives.**

This includes financial support, health data and expertise.

Recommendation 9: **That Ontario health data be improved, beginning with (a) expansion of routinely collected data bases to render them useful for planning and evaluation; and (b) conduct of an Ontario Health Survey as soon as possible to provide baseline data on health status, health determinants and attitudes, and repetition of this survey at regular intervals.**

As noted in Chapter V, the data base must be markedly strengthened to permit specification of health objectives, development of programmes, and monitoring of progress.

The next three recommendations are intended to promote the goals process, by increasing its visibility.

Recommendation 10: **That a conference of interested ministries and organizations be held soon after release of this report, to discuss its implementation.**

This conference will maintain interest and momentum, and provide further opportunities for consultation.

Recommendation 11: **That a condensed version of this report be produced for general circulation.**

Wide distribution of this version can contribute

to the marketing function and promote wider discussion of health issues.

Recommendation 12: **That the Minister of Health report regularly to the legislature regarding progress in achieving the health goals.**

The report should be based on the report of the Advisory Committee on Health Goals, and should include recent activities relevant to the Health Goals, and data showing the amount of progress made towards their achievement. The report will provide further visibility and opportunities for debate on health issues.

Local Role. Communities and individuals cannot always identify with province-wide goals, because of the broad nature of such goals. It is the adoption, internalization and subsequent translation of these efforts to unique local circumstances and the specification of local targets that make the whole process come alive to individuals and gain relevance to the communities in which they live. In determining an appropriate focus for planning and coordination at the local level, the Panel considered many of the same factors which applied at the provincial level. The lead agency at the local level needs to have access to a wide range of expert and public opinion, and to coordinate diverse community views, in order to develop agreed upon targets and indicators arising from the provincial goals and objectives.

At present, there is no local agency that has all of the characteristics and experience to undertake this task. It is therefore necessary to create a new special purpose body, or to assign responsibility to the agency that most closely matches the requirements. The Panel has concluded

that it is preferable to designate an existing agency, and after reviewing potential candidates has agreed that the agency which best suits the task is the District Health Council (DHC). The key points in their favour include:

* their broad mandate to undertake and coordinate health planning for their areas;

* their considerable experience in bringing together a wide variety of experts and community residents for health planning projects;

* their in-depth understanding of the broad range of health, social, environmental and economic concerns of the community;

* their broadly representative composition;

* their lack of direct service responsibilities; and

* their well established community profile and respect.

There are also some concerns over assigning this responsibility to the District Health Councils:

* the lack of consistency across the province in the resources available for planning and coordination;

* the preoccupation of some DHCs with hospital-based services; and

* insufficient emphasis in their mandate on primary care, community-based services, and disease prevention and health promotion.

The Panel believes that these limitations can be overcome.

Recommendation 13: **That District Health Councils be designated the local agencies responsible to take the lead in the health goals process.**

This function should be recognized as a central responsibility of the DHCs, and the necessary additional resources provided. It will be important for the DHCs to collaborate with a wide range of community agencies, particularly the Local Official Health Agencies (Health Departments and Health Units). Indeed, it would be desirable for the Medical Officer of Health to play a major role in the local committee responsible for setting health objectives. Where there is no DHC, the Local Official Health Agency should assume the role of lead agency.

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APPENDIX I: AN EXAMPLE OF THE GOALS PROCESS

This Appendix provides an example of how specific objectives might be framed and of the means by which these objectives might be achieved. The goal chosen is goal 5.1, **Eliminate the use of tobacco.** The achievement of this goal will contribute to the achievement of several other goals, viz., decreased mortality and morbidity due to various causes, reduction in fires, cleaner environments and (with appropriately designed programmes) a reduction in the inequities in some of these areas. This example is not intended to be comprehensive, but simply to illustrate the sorts of objectives and strategies which might be applied to elaboration of the goals in this report. For a more highly developed treatment, highly compatible with the approach taken in this report, see the Directional Paper of the National Program to Reduce Tobacco Use in Canada[1], released in June 1987.

Objectives for the Elimination of Tobacco Use in Ontario

Objectives are presented for tobacco use and for the process by which the changes in smoking behaviour are to be achieved, but not for the related health outcomes, since these would fit under Goal 3. Several approaches to target-setting are possible. In this example, a specific level of tobacco use is listed as the overall provincial target. In some cases, marked by an asterisk (*), individual regions are invited to decide on reductions appropriate for themselves; the regional targets could vary considerably, as a result of differences in baseline values or in local priorities. The objectives have drawn extensively on the recent Directional Paper[1], on the U.S. Objectives for the Nation[2], and on the Report of the Ontario Council of Health Task Force on Smoking[3].

1. Objectives regarding Prevalence of Smoking

1.1 Reduce the percentage of children (age <15) who smoke.
Possible Target: Reduce the percentage to 0%* by 2000*.

1.2 Reduce the percentage of adolescents (age 15 to 19) who smoke.
Possible Target: Reduce the percentage to 10%* by 2000*.

1.3 Reduce the percentage of adults (age 20+) who smoke.
Possible Target: Reduce the percentage to 20%* by 2000*.

1.4 Eliminate the use of smokeless tobacco.
Possible Target: Eliminate all use by 1995*.

Communities may wish to focus on specific age-sex groups, (e.g., teen-aged girls) or to identify additional target groups such as pregnant women, parents of young children, or health professionals.

2. Objectives regarding Data Sources

2.1 Improve surveillance data by initiating a periodic provincial health survey which includes data on prevalence and patterns of tobacco use, beliefs and attitudes on a regional level, focussing on high-risk populations.
Possible Target: First survey to have been conducted by 1990.

2.2 Improve the data on the tobacco industry by initiating

an annual review of current issues, including labelling, advertising, types of products marketed, and regulatory activity.
Possible Target: First review to occur in 1990.

3. Objectives regarding Research

3.1 Advance the understanding of the determinants of tobacco use by initiating a provincial research fund for health promotion, with priorities for research on the determinants and patterns of tobacco use, and the effectiveness of prevention and cessation programmes.
Possible Target: Fund to be in place by 1990.

4. Objectives regarding Programmes

4.1 Improve the availability of prevention programmes by offering programmes in the schools, directed at smoking and smokeless tobacco, and based on models of proven effectiveness
Possible Target: Programmes to be available in 100%* of schools by 1990.*

4.2 Improve the availability and accessibility of smoking cessation programmes in the workplace.
Possible Target: Programmes to be available in 80%* of all workplaces by 1990.*

5. Objectives regarding Protection

5.1 Improve the protection of non-smokers from the hazards of smoking, by enacting legislation that prohibits smoking in enclosed or restricted public places and establishes separate smoking areas at work and in dining establishments.

Possible Target: Legislation to be in place by 1990.

6. Objectives regarding Awareness

6.1 Increase the proportion of the adult population who can list the major health effects of smoking.
Possible Target: 85%* of public to be able to list at least 5 major effects by 1995.*

6.2 Support federal initiatives to increase the awareness by smokers of the hazards of smoking, by increasing the strength and visibility of warnings on packaging, with use of rotating messages.
Possible Target: To be in place by 1990.

6.3 Increase awareness of users of the hazards of smokeless tobacco, by introducing strong, rotating warning messages on packaging.
Possible Target: To be in place by 1990.

6.3 Increase the proportion of health professionals who actively promote non-use of tobacco.
Possible Target: Level to reach 100%* by 1990.*

7. Objectives regarding Availability and Accessibility

7.1 Increase the price of tobacco by raising taxes, and identifying the proceeds for anti-smoking purposes.
Possible Target: Price to rise significantly more rapidly than Consumer Price Index over the next ten years.

7.2 Enforce the prohibition of sales of tobacco products to minors.
Possible Target: Rigorous enforcement by 1990.

7.3 Prohibit advertising of tobacco products.
Possible Target: Complete ban on tobacco advertising to be in place by 1995.

7.4 Ban the importation and sale of smokeless tobacco in Ontario.
Possible Target: Ban to be in place by 1995.

Strategies for Elimination of Tobacco Use in Ontario

This section shows how each of the strategies listed in Chapter V can contribute to elimination of tobacco use in Ontario.

1. Economic Development.

The economy of some parts of southern Ontario is heavily dependant upon raising tobacco. Incentives should be provided to encourage these farmers to shift to products which are not dangerous to health, along with reasonable compensation for lost income. Concurrently, tobacco imports must be eliminated.

2. Management Process

Under its strategic plan, the Ministry of Health should direct resources to programmes aimed at prevention or cessation of tobacco use, and withhold support from any programmes which support tobacco use. All provincial buildings and facilities should be declared smoke-free, contributing to an organizational culture conducive to non-use of tobacco.

3. Resource Allocation

The role of health professionals should be strengthened through education, and through appropriate payment for counselling against smoking. More health educators should be trained, and more public health and other agencies funded to support anti-tobacco programmes. Funds should be shifted from laboratories working to improve tobacco productivity and quality to anti-tobacco research. Tax money raised from the tax on tobacco should be directed explicitly towards anti-tobacco programmes, as has been done in Minnesota.

4. Coordination and Collaboration

Federal-provincial collaboration is needed in support of the national programme currently being established[1]. More particularly, coordination will be required to regulate an orderly reduction in the production of tobacco, to determine the taxes on tobacco, to restrict advertising of tobacco, and to encourage and support needed research.

Several ministries must be involved at the provincial level. As already noted, the Ministry of Agriculture should ensure the future economic stability of farmers who currently raise tobacco. The Ministry of Education should adjust school curricula. The Attorney-General should introduce legislation regarding smoke-free zones and enforce the restrictions on sales to minors.

The Provincial and municipal governments should cooperate in establishing smoke-free workplaces, and in funding cessation programmes.

Community agencies interested in tobacco control should collaborate in strengthening their advocacy activities and

providing appropriate prevention and cessation programmes, while avoiding duplication and waste. This includes commercial and non-profit groups.

5. Legislation and Regulation

Tobacco advertising should be eliminated. The prohibition on sales to minors should be enforced. Smoking areas should be established in public and work environments, and smoking restricted to these areas. Packaging should continue to be regulated. The demand for tobacco is known to be closely related to price: a 10% increase in price is associated with a 4% reduction in demand among adults, but a 14% reduction among youth. Taxation should therefore be used to increase the price of tobacco.

On the positive side, incentives should be provided to tobacco growers and processors to switch to other products. Tax deductions might be allowed to persons who have successfully completed cessation programmes.

6. Social Marketing for Health

The use of tobacco products should be made socially unacceptable, and the health and other attractions of becoming a non-user should be emphasized. Organizations working for a smoke-free environment should be supported. Media programmes should be initiated to advertise against tobacco. Athletes and other public idols should be used as role models to discourage children from using tobacco.

7. Community Development

Communities should be encouraged and supported to identify high-risk groups and to develop innovative pro-

grammes appropriate for them. Workers should be encouraged to organize to demand smoke-free zones, and students to demand smoke-free schools. Ethnic and other groups should be encouraged to develop programmes aimed at their own members.

8. Health Education

Information concerning the effects of smoking on health should be more widely disseminated, especially to smokers (smokers are more likely to have the incorrect beliefs about the relationships of smoking and health[4]). Population groups deserving special emphasis include:

* Pregnant women, who need to know about the increased risk of prematurity, still birth and miscarriage due to smoking, as well as the increased risk to young children. The primary physician has a key role in counselling women and their spouses, both in early pregnancy and in the post-partum period.
* Users of oral contraceptives, who need to be made aware that smoking places them at special risk. Health professionals must counsel all users.
* Children, who need skills to resist peer pressure.
* Employers, who need to know that reductions in smoking can have wide-ranging benefits in terms of improved employee health, with correspondingly increased productivity, and lower insurance and cleaning costs. Employees, employers, community members and health professionals should work together to identify the best mix of programmes for their particular needs.

9. Health Advocacy

Health Advocacy has already worked well in reducing the use of tobacco. Further efforts are needed by health

professionals and health educators, consumers, workers, and special interest groups such as the Non-Smokers' Rights Association. Subjects for this advocacy include the need for educational programmes, appropriate legislation, research, incentive plans for industries that promote non-smoking in the workplace, encouragement of insurance companies to offer favourable rates to non-smokers and to companies with non-smoking or restricted smoking policies, and private business initiatives such as the move by pharmacists to remove tobacco products from their stores.

10. Appropriate Technology

This strategy would not contribute to this goal.

11. Research and Information

While the Health Promotion Survey offers valuable national data, provincial data are weak because of the small sample size. Further research is needed to determine who uses tobacco and why (especially among children and young females), and to evaluate the effectiveness of smoking cessation programs in various milieus, i.e., what works best for whom. Better data are required on the economic benefits of reduced illness burden accompanying reductions in consumption.

References

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APPENDIX II: ORGANIZATIONS WHICH MADE SUBMISSIONS

Addiction Research Foundation
Board of Directors of Drugless Therapy: Naturopathy
Cambrian College
Canadian Council of Christians and Jews
Canadian Federation of University Women (Ontario Council)
Canadian Red Cross, Ontario Division
Carleton University Health Services
College of Family Physicians of Canada, Ontario Chapter
Consumers' Association of Canada (Ontario Division)
Children's Hospital of Eastern Ontario, Ottawa
Georgian College of Applied Arts and Technology
Gerontology Research Council of Ontario
Hamilton and District Council of Women
Loyalist College, Developmental Services Worker Program
McMaster University Faculty of Health Sciences
Muskegog Cree Council
National Anti-Poverty Association
Nurse Practitioner Association of Ontario
Ontario Advisory Council on Women's Issues
Ontario Association of Children's Aid Societies
Ontario Association of Health Promotion Specialists in Public Health
Ontario Association of Homes for the Aged
Ontario Association of Professional Social Workers
Ontario Association of Medical Laboratories
Ontario Association of Children's Mental Health Centres
Ontario Association of Optometrists
Ontario Chamber of Commerce
Ontario Chiropractic Association
Ontario Health Coalition
Ontario Hospital Association
Ontario Naturopathic Association
Ontario Psychological Association
Ontario Teachers' Federation
Ontario Nursing Home Association
Ontario Pharmacists' Association
Ontario Public Health Association
Ontario Registered Nurses Assistants' Association
Ontario Society of Occupational Therapists
Ontario Society of Nutritionists in Public Health
Paradigm Health
Paramedical Services Hotel Dieu Hospital, St. Catherines
Positive Parenting
Registered Nurses' Association of Ontario
Sir Sandford Fleming College, Lindsay Campus
Sunnybrook Medical Centre
University of Ottawa, Programme in Health Administration
University of Toronto, Programme in Gerontology
University of Toronto, School of Physical Health Education
University of Toronto, Faculty of Nursing

University of Toronto, Faculty of Dentistry
University of Waterloo, School of Optometry
University of Waterloo, Program in Gerontology
University of Waterloo, Human Kinetics and Leisure Studies
University of Waterloo, Faculty of Environmental Studies
University of Waterloo, Department of Sociology
University of Western Ontario, Centre for Family Medicine
University of Windsor, Health Services
York University, Atkinson College

District Health Councils

Algoma District Health Council
Cochrane District Health Council
Eastern Ontario District Health Council
Haliburton, Kawartha & Pine Ridge District Health Council
Haldimand Norfolk District Health Council
Halton District Health Council
Kent County District Health Council
Kenora-Rainy River District Health Council
Kingston, Frontenac, Lennox and Addington District Health Council
Metropolitan Toronto District Health Council
Niagara District Health Council
Ottawa-Carleton Regional District Health Council
Rideau Valley District Health Council
Thames Valley District Health Council
Thunder Bay District Health Council
Waterloo Region District Health Council

APPENDIX III: TOPICS COVERED IN SUBMISSIONS TO PANEL

	Total for Each Goal	District Health Council	Public Health Association	Health Professional Org'n	Health Institutions	Univ./Colleges Org'n	Other Health Org'n	Child	Native	Women	Seniors	Social Org'n	Religion	Business Org'n	Other Professional Org'n
Total Number of Organizations	78	16	2	14	4	16	8	3	1	2	1	6	1	1	3
1.0 EQUITY (TARGETED)															
.1 Multicultural	2					1				1					
.2 Child	4	1		1			1	1							
.3 Native	1	1													
.4 Women	1									1					
.5 Seniors	8	1		1		1	4			1					
.6 Geog. Disadvantaged	7	4		1		1	1								
.7 Poor	1											1			
.8 Disabled/ill	3					3									
1.0 EQUITY (GENERAL)	2	1					1								
.1 Outcomes	0														
.2 Determinants															
.1 soc/env factors	4	1		1		1	1								
.2 econ/env factors	7	4					1					2			
.3 physical															
.4 health care services	5	1				2	1	1							
2.0 HEALTH POTENTIAL	2					2									
.1 Quality of Life	3	1				1	1								
.2 Achieve Potential	8					5	3								
.3 Controlling Health	10	2		1		3	2		1	1					
3.0 HEALTH EXPECTANCY	1	1													
.1 IHD	1	1													
.2 Injuries	7	2		1	1		1	1				1			
.3 Mental Illness	2		1									1			
.4 Cancer	0														
.5 Chronic Respiratory Disease	0														
.6 Communicable Diseases/STDs	0														
.7 Muskuloskeletal	0														
.8 Dental Disease	1					1									
.9 Disability	1	1													
4.0 ENVIRONMENTAL	1	1													
.1 Family	1	1													
.2 Community	4	3					1								
.3 Workplace	7	3					3					1			
.4 Physical	2	1										1			
.5 Habitats	1					1									

	Total for Each Goal	District Health Council	Public Health Association	Health Professional Org'n	Health Institutions	Univ./Colleges Org'n	Other Health Org'n	Child	Native	Women	Seniors	Social Org'n	Religion	Business Org'n	Other Professional Org'n
Total Number of Organizations	78	16	2	14	4	16	8	3	1	2	1	6	1	1	3
5.0 BEHAVIOUR	2					1						1			
.1 Tobacco	6	4				1						1			
.2 Alcohol/Drugs	5	3				1	1					1			
.3 Nutrition	7	1		1		2		2				1			
.4 Exercise	7	3				2	1					1			
.5 Sexual Practices	0														
.6 Driving	0														
.7 Violence	0														
6.0 HEALTH SERVICES	5			3			2								
.1 Manpower	9	1		2		4				1		1			
.2 Training	4			2		1				1					
.3 Delivery of Services	3					1	1					1			
primary care	2			1			1								
community based	14	5		3		1	2				1			1	1
alt. org'n models	8	3		1		3									1
.4 Target Delivery															
seniors	7	2		1		1	3								
children	3			1		1		1							
.5 Appropriate Utilization	3	1		1			1								
.6 Technology	4	1				2	1								
7.0 HEALTHY PUBLIC POLICY/STRATEGIES															
.1 Planning	13	6	1	2		2	2								
.2 Shift in Emphasis	20	5		3		4	6			2					
.3 Cost-Control (General)	2	1				1									
focus:user	3	1				1	1								
focus:prof	5	3		1		1									
.4 Resource Allocation/Ration.	7	3				1	2			1					
.5 Lifestyle Choices Easier	7	1		2		1	3								
.6 Interministerial Coordination	9	2	1	1	1	1	3								
.7 Public Education Programme	15	5		1		3	4	1				1			
.8 Consumer/Provider Cooperation	7	2	1	1		2	1								
.9 Healthy Public Policy	8	3	1	1		1	1								
8.0 IMPLEMENTATION															
.1 Research/Evaluation	17	4		7		6									
.2 Data	12	5	1	2	1	1	2								
.3 Mechanisms for Follow-up	1									1					